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COMPLEMENT AND PURPOSE CLAUSES IN K'ICHE'

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COMPLEMENT AND PURPOSE CLAUSES IN K'ICHE'

by

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To my mother and father:

Taxa and Migue

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Telma Angelina Can Pixabaj

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COMPLEMENT AND PURPOSE CLAUSES IN K'ICHE'

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The University of Texas at Austin, 2015

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This dissertation describes the morphological and syntactic properties of complement and purpose clauses in K'iche'. K'iche' is a Mayan language spoken in Guatemala.

Complement clauses are clausal elements that correspond to an argument of the matrix clause (Noonan 2007). In this study I show that syntactically there are three types of complement clause in K'iche': finite complements with complementizers (CP-complements), finite complements without complementizers (S-complements), and non-finite complements. CP-complements are full clauses. S-complements have a less elaborated structure where negation and topic do not have space. Therefore these are separate types of complements contrary to what has been said (Larsen 1988). Besides that, S-complements usually require coreference of an argument of the matrix with an argument of the complement, whereas CP-complements do not have such restrictions. Non-finite complements do not bear time/aspect/mood (TAM) marking nor subject agreement markers. Therefore this type of complement has a smaller structure than either of the finite complements. They depend on the matrix

clause for the interpretation of TAM and they display interesting control relations that are also found in non-finite purpose clauses.

I also propose three types of purpose clauses in K'iche' that pattern with complement clauses: finite purpose clauses with subordinators, finite purpose clauses without subordinators, and non-finite purpose clauses. Finite purpose clauses with subordinators are like non-finite complement clauses without complementizers in the sense that they are like independent clauses. The only difference is that it is not possible to extract any element from a purpose clause, while extraction is possible with finite complements. Non-finite purpose clauses are like non-finite complement clauses, except that non-finite purpose clauses are adjuncts rather than arguments. Although finite purpose clauses without subordinators and finite complements without complementizers look like the same, I show that the former are paratactic while the latter are embedded. Here is where the parallelism between complement and purpose clauses breaks down.

In this study I provide an inventory of verbs that select each type of complement. I show that the morphosyntactic integration resembles the semantic integration between the matrix and the complement clause, as Kockelman (2003) shows for Q'eqchi'.

Table of Contents

List of Tables

List of Figures

List of Maps

Abbreviations

1	First person
2	Second person
3	Third person
A	Set A, Ergative marker
ACT	Active
ADV	Adverb
AF	Agent Focus
AFFE	Affective word
AFI	Affirmative particle
AGT	Agent
AP	Antipassive
B	Set B, Absolutive marker
CAU	Causative
CL	Classifier
CND	Conditional
CNJ	Conjunction
COM	Completive
COMP	Complementizer
DAT	Dative
DEM	Demonstrative
DET	Determiner
DEP	Dependent suffix
DIR	Directional
EXS	Existential
F	Formal (honorific person)

FOC	Focus
FUT	Future
IMP	Imperative
INC	Incompletive
IND	Infefinite
INF	Infinitive
INM	Inmediative
INT	Interrogative
IRR	Irrealis
IV	Intransitive verb
MOV	Movement
MSR	Measure
NF	Non-finite
N.EXS	Negative form of existential
NEG	Negative
NUM	Number
P	Plural (person marker)
PART	Particle
PASS	Passive
PP	Participle
PRG	Progressive
PL	Plural (particle)
PRED	Predicative (deriv. suffix)
PREP	Preposition
PRO	Pronoun
REC	Reciprocal
RECI	Recent
REF	Reflexive

REL	Relativizer
RN	Relational noun
S	Singular (person marker)
SS	Status Suffix
TNS	Intensifier
TOP	Topic
TR	Transitivizer
VN	Verbal Noun

Chapter 1

Introduction

This dissertation contains a synchronic description of the structure of complement and purpose clauses in K'iche'. This chapter is organized as follows: in §1 I provide some background on the language and its speakers; in §2-4 I preview the main issues to be addressed in the dissertation, focusing on complementation in §2 and on purpose clauses in §3, and offering a broader summary in §4.; in §5 I discuss the methodology used to collect data; and in §6 I sketch the organization of the remainder of the dissertation.

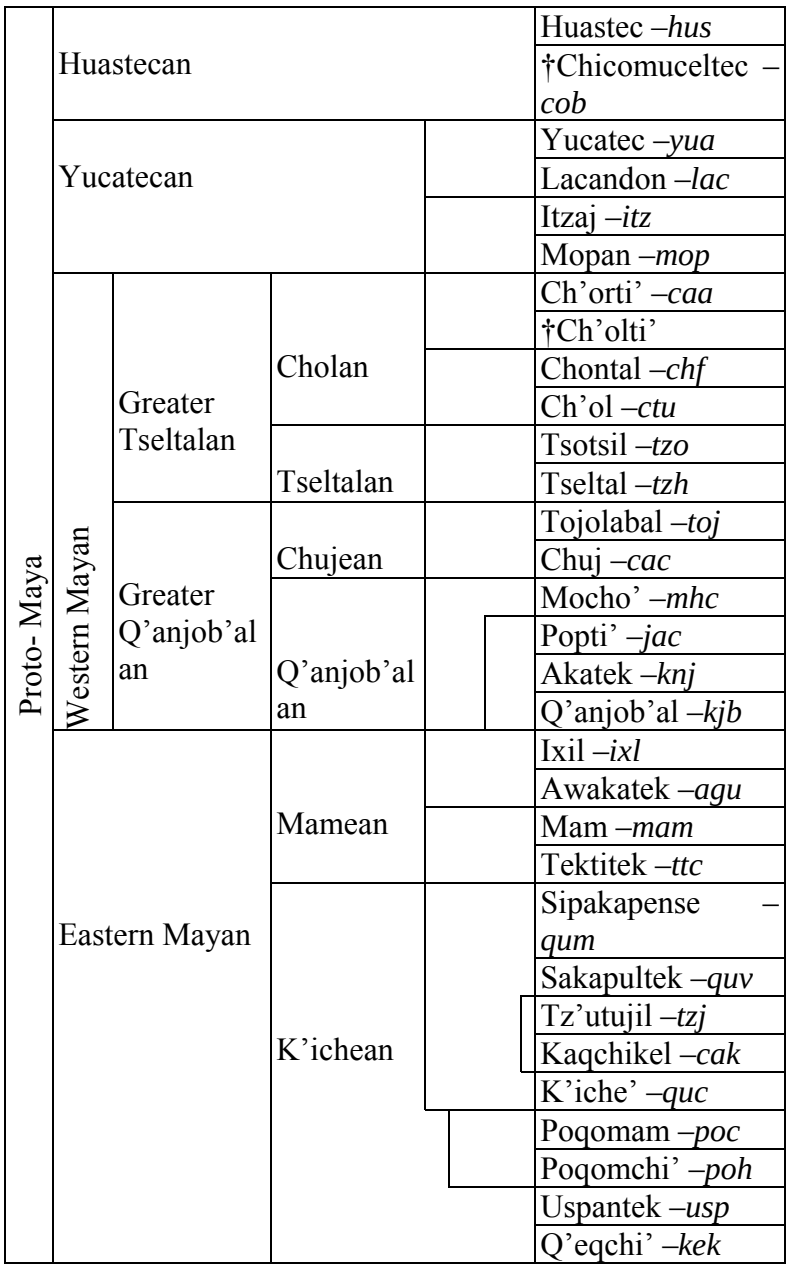
1. Background

1.1. The language and its speakers

K'iche' is a K'ichean language of the Eastern branch of Mayan (see the family tree in Figure 1). It is spoken in Guatemala by about a million people, in all or part of 78 municipalities in 9 departments of Guatemala (Richards, 2003; see Maps 1 and 2). According to Kaufman (1975), K'iche' has five dialect regions: West, East, Central, North, and South. This study concerns the Western region, though it does not cover all the towns in this region; it focuses on three: Nahualá, Santa Catarina Ixtahuacán (in the highlands), and Santa Lucía Utatlán, all in the department of Sololá. I chose these towns since they form a dialect area, although there can be some differences between them.

In general the use of the K'iche' language is robust; however, in many communities new generations are not learning it. K'iche' is shifting to Spanish even at home, and its use is becoming restricted among adults and elders. Because of that, K'iche' is threatened with losing speakers, and even more threatened with losing certain discourse genres. Its use is endangered in many cultural practices that involve formal and ceremonial language. Also, it is important to note that in spite of some attempts to document the language, K'iche' does not have a publicly available corpus of analyzed texts. The documentation project on which this dissertation was based was an effort to fill these gaps by creating a publicly available corpus of ceremonial discourse.

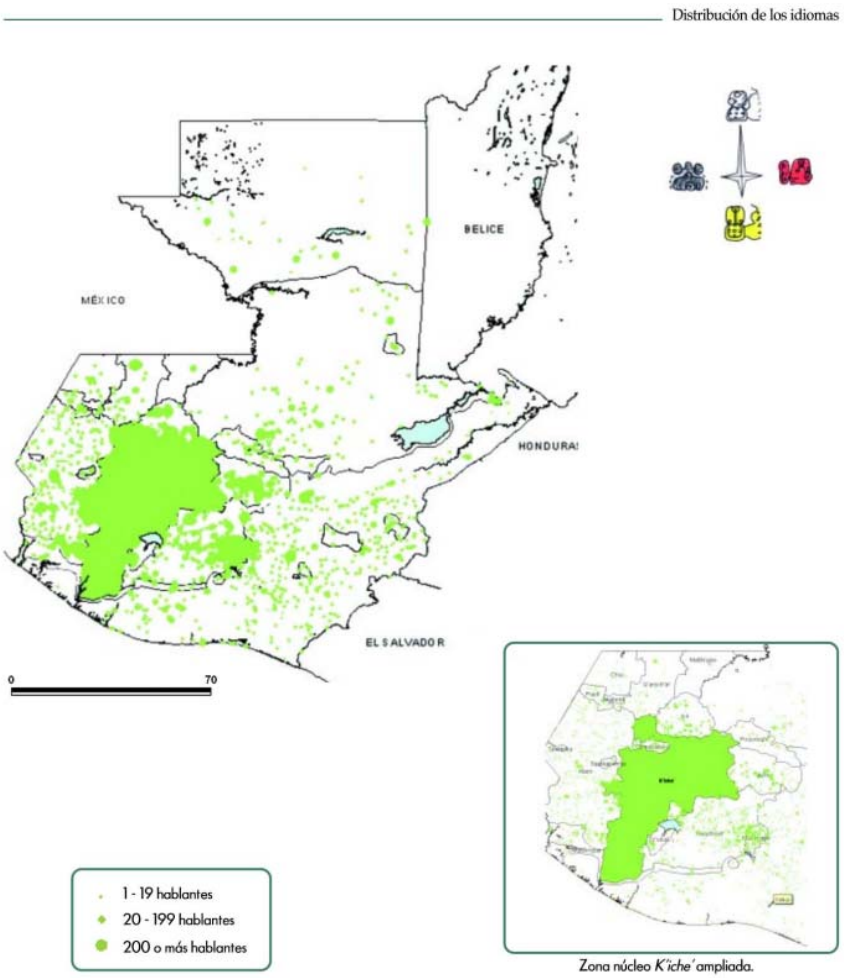
Figure 1.1. The Mayan Language Family Tree (Campbell and Kaufman 1985:189)



Map 1.1. Guatemalan Map

http://espanol.mapsofworld.com/continentes/norte-america/guatemala/guatemala

Map 1.2. K'iche' Area (Richards 2003:63)



1.2. Orthography

The practical orthography for K'iche' and other Mayan languages is based on Latin characters. The *Academia de Lenguas Mayas de Guatemala* (ALMG), in Presidential Decree (*Acuerdo Gubernativo*) 13-2013, made official 27

orthographic symbols, 22 for consonants and 5 for vowels. Table 1.1 lists the consonant symbols, and their corresponding pronunciations in the International Phonetic Alphabet (IPA) in the cases where the orthographic symbols are not the same as the IPA symbols.

Table 1.1. K'iche' consonants

	bilabial	interdental	alveolar	alveo-palatal	palatal	velar	uvular	glottal
plosive	p b' [ɓ]	t t'				k k'	q q'	' [ʔ]
nasal	m		n					
flap			r					
fricative			s	x [ʃ]			j [χ]	
affricate			tz [ts] tz' [ts']	ch [tʃ] ch' [tʃ']				
Lateral			l					
Approximant	w				y [j]			

Regarding vowels, there has been a debate about what features should be indicated in the orthography: whether lax vowels should be distinguished from tense vowels, or instead long vowels from short vowels. Length and tenseness contrasts are found in different dialects of the language. However, in Presidential Decree 13-2013 the ALMG decided to represent only five simple vowels. This

does not reflect any of the length or tenseness distinctions that are present in the different dialects.[1]

The K'iche' spoken in Santa Lucía Utatlán, Nahualá, and Santa Catarina Ixtahuacán has a distinction between long and short vowels. Since this study is of a descriptive and not a normative nature, I represent these distinctions, especially when they come from a recorded text where the goal is to give a transcription as close as possible to the speaker's pronunciation. In the table below I show the vowels phemes nd their ortographic represention in those places.

Table 1.2. Vowel phonems and their ortogrphic respresentation

/i/ i /i:/ ii		/u/ u /u:/ uu
/e/ e /e:/ ee		/o/ o /o:/ oo
	/a/ a /a:/ aa	

In many cases, the distinction between long and short vowels is relevant for this study. For instance, passive forms of root transitive verbs are marked by lengthening the root vowel, and one type of verbal noun which will be discussed in this study has a passive base. This is one case where it is important to represent the length of the vowel (although there may be cases where the length is not marked or is being lost, or not as clear as in other cases).

[1] For more details on the vowel system and variation in K'iche', see López (1994).

(1) r-**ii**l-iik
A3S-see.PASS-VN
'Its being seen.' (from the root *il* 'to see')

Another case where vowel length is relevant is in the last syllable of a derived transitive verb. Here we find a long vowel, as in (2a), but is shortened when the verb is not the final element of the intonational phrase, as in (2b). This length alternation will be used as a diagnostic for prosodic structure in Section 4.3. Without representing the length of the vowels in these contexts it would not be possible to show this alternation.

(2) a. x-oj-ki-sik'**ii**-j
COM-B1P-A3P-call-ACT
'They called us.'

b. x-oj-ki-sik'**i**-j iwiir
COM-B1P-A3P-call-ACT yesterday
'They called us yesterday.'

For all these reasons, I have chosen to represent vowel length in this dissertation. But I would like to emphasize that this study aims to provide a description and analysis of specific topics in K'iche'. It does not aim to suggest a standard or official writing system for general use.

1.3. Previous work on K'iche'

Unlike some other Mayan languages, K'iche' has received a great deal of academic attention. There have been a number of significant works on K'iche',

especially since 1980. The most relevant are two doctoral dissertations (Mondloch 1981 and Larsen 1988) which contain the most advanced syntactic analyses of K'iche'. Mondloch's dissertation is about voice in K'ichee', and Larsen's is about ergativity. Larsen's dissertation is based on the K'iche' of several municipios: Momostenango, Nahualá, Santa Catarina Ixtahuacán, Zunil, Cantel, and San Cristóbal Totonicapán, all of which belong to the Western region, and Santa María Chiquimula and Chichicastenango, which belong to the Central region. Modloch's data, on the other hand, mainly comes from Nahualá (Western region).

There is one reference grammar (López 1997), which is the most complete reference available for K'iche', but its treatment of complex clauses is superficial compared to what exists for other Mayan languages (Aissen 1987, Craig 1977, Kockelman 2003, Mateo, 2008, Polian 2013a, Vázquez 2013, Zavala 2007, among others). López's grammar is mainly based on the K'iche' of Santa Cruz del Quiché, which belongs to the Central region.

A doctoral dissertation by Trechsel (1981) and a master's thesis by Sam Colop (1988) make theoretical contributions to the study of ergativity in K'iche' (from Categorial Grammar and Relational Grammar perspectives, respectively). There are two recent doctoral dissertations, one by Duncan (2010) on *The syntactic structure of K'ichee'*, and the other by Velleman (2014) on *Focus and movement in a variety of K'ichee'*. Other studies include an M.A. thesis (Can Pixabaj 2009) on verbal nouns, and two B.A. theses: López 1999, on demonstratives, and Can Pixabaj 2004, on topicalization. There are also important articles on K'iche', including three on topic and focus (England 1997, 2009, and Can Pixabaj and England 2011), one on the structure of antipassive by Davies and Sam-Colop (1990), and one on agent focus in K'ichee' by Aissen (2012), among others.

There are some educational materials available in K'iche'. Since the advent of bilingual education in Guatemala, governmental and non-governmental

organizations have contributed to the production of educational materials. However, those materials are not enough to distribute to all schools, and some authorities refuse to use them.

There have been some efforts at documentation. The most recent and relevant project is *Discurso ceremonial K'ichee'* by Florentino Ajpacajá (2001). This work contains discourses that are used in a formal marriage petition. They are not recorded narratives, nor are they elicited; it seems that the author (who was an elder who had participated many times in such formal events) instead wrote down what he would say or had heard said under those circumstances. This document is very valuable. As far as I know, it is the only document about marriage petitions. It contains K'iche' discourses with translation to Spanish. However, there is no audio recording of the discourses. The author does not mention whether there was a recording (though, as I mentioned above, it does not seem that the discourses were transcribed from one). Also, the document is not analyzed; it is only translated.

There are also religious documents in K'iche', such as the Bible and the missal translated to K'iche', and some very important colonial documents such as the Popol Wuuj and other documents called "títulos" which were originally written in K'iche'.

In the area of lexical documentation, there are at least two recent dictionaries that Zavala (2009) considers to be scientific work. One is a bilingual dictionary produced by Ajpacajá et al (1998) and the other is a monolingual dictionary by Ajpacajá (2001). The latter is one of the largest dictionaries produced for a Mayan language, and is the only full-length monolingual dictionary of a Mayan language.

With regard to texts, the Archive of Indigenous Languages of Latin America (AILLA) already has a number of K'iche' audio recordings. However, almost none of them have been transcribed or analyzed. Until very recently, the University of New Mexico throught the Latin American & Iberian Institute has

made public audio and transcription of K'iche' materials. There are two books documenting oral tradition in K'iche', one by Eisshaar (1995) and the other by the Academy of Mayan Languages (2002). The first only has transcription: the document says that the narratives were recorded, but does not say anything about where they are from. The second does not say whether the narratives were recorded; however, the speakers who collaborated with the researcher are acknowledged. These documents cover many discourse genres, but all of them were elicited. Also, there is no analysis of any of them. Those materials may be useful for certain purposes, but not for documenting speech in a natural context, nor for linguistic purposes if the researcher does not speak the language. The only truly linguistically useful K'iche' text is the one prepared by William Norman in Furbee-Losee (1976) which includes transcription, translation, and notes.

In short, K'iche' does not have a publicly available corpus of analyzed texts, as Zavala and Smith-Stark point out (2007). In §5.1 of this chapter, I describe the documentation project that I conducted in Guatemala to document formal and ceremonial discourses in K'iche'. It includes a set of analyzed texts which will fill some gaps with regard to the documentation of a genre in danger and contribute to the construction of a K'iche' corpus.

2. Complementation in Mayan

2.1. Previous work and summary of novel contributions

Earlier studies on complementation in Mayan languages include Craig 1977 on Popti' (Jakaltek), England 1983 on Mam, and Bohnemeyer 2002 on Yucatec, among others. More recent studies can be found in Palancar and Zavala 2013. Aissen 2014 presents an overview of complementation in Mayan.

Complementation in K'iche' is described in Larsen 1988 and López 1997. Studies of complementation in other K'ichean languages can be found in Dayley's Tz'utujiil grammar (1985), García Mátzar and Rodríguez Guaján's Kaqchikel grammar (1997), García Ixmatá's Tz'utujiil grammar (1997), Mó Isem's Sakapultek grammar (2007), and Can Pixabaj's Uspantek grammar (2007); and in Kockelman 2003 on Q'eqchi'.

In the remainder of §2, I address the main points of the studies just listed, and describe how this study builds on them. From earlier studies we know that there are at least two types of complement clauses in Mayan languages: finite and non-finite complements. I propose that there are three types of complement clause in K'iche': finite complements introduced by a complementizer, finite complements not introduced by any complementizer, and non-finite complements. §2.2 discusses the distinction between the two types of finite complement, §2.3 discusses non-finite complements, and §2.4 discusses how verbs select which type of complement they will take.

2.2. Finite complements

Most Mayan languages have finite complements with an overt complementizer. (3) is an example from Mopan, (4) from Kaqchikel, and (5) from Q'anjob'al.

(3) in-k'ati [**ka'** jok'-o'on]
A1S-want COMP leave-B1P
'I want that we leave.' {ALMG 2001:309}

(4) x-ø-u-b'ij a Mich
COM-B3S-A3-say CL Mich
[**chi** x-ø-u-loq' jun uq nu-tata']
COMP COM-B3S-A3S-buy one corte A1S-father
'Mich said that my father bought a corte.'
{García Matzar and Rodríguez Guaján 1997:450}

(5) man y-ojtaqoq naq ta [**tol** a cham aj mulnajil]
NEG A3SG-know CL CND COMP FOC CL owner work
'He did not know that he was the owner of the job...'
{Mateo Toledo 2013:255}

It has been observed that in many languages (Aissen 2014) finite complements are extraposed, as in the Kaqchikel example in (4). This seems to be due to the fact that a complement clause is more complex than an NP object, as I will discuss in Chapter 4 (§4.2).

A number of languages also have finite complements which are not introduced by a complementizer, as in the examples below. In the Popti' sentence in (6), the complementizer *tato* is optional, and the Tz'utujil sentence in (7) and the Q'eqchi' sentence in (8) do not have a complementizer at all.

(6) ay wala' [(**tato**) chach wayi]
I would like that you sleep
'I would like for you to sleep.' {Craig 1977:234}

(7) n-ø-w-aajo' [n-ø-in-ch'ey]
INC-B3S-A1S-want INC-B3S-A1S-hit
'I want to hit him.' {Dayley 1985:391}

(8) n-w-inw-aj [t-in-xik sa' li k'ayil]
INC-B3S-A1S-want FUT-B1S-go inside the market
'I want to go to the market' (or 'I want [that] I will go to the market')
{Kockelman 2003:28}

Several suggestions have been made concerning differences between the two types of finite complement. Dayley (1985), Kockelman (2003), and others have observed that finite complements without complementizers exhibit a restriction on reference: they require the complement subject to be coreferential with the matrix subject. . Contrast each pair of examples below, and note that in the (a) examples there is a complementizer and no coreference, while in the (b) examples there is coreference but no complementizer.

(9) a. Jar iixoq x-ø-ø-b'ij ch-w-e
DET woman COM-B3S-A3S-tell PREP-A1S-RN
[**chi** x-ø-k-alaq'aj r-pwaq]
COMP COM-B3S-A3P-robar DET-dinero
'The woman told me that they stole her money.' {Dayley 1985:392}

b. n-ø-**w**-aajo' [n-ø-**in**-ch'ey]
INC-B3S-A1S-want INC-B3S-A1S-hit
'I want to hit him.' {Dayley 1985:391}

(10) a. na-w-x-naw [**naq** ink'a' x-in-war]
INC-B3S-A3S-know COMP NEG COM-B1S-sleep
'He knows that I have not slept.' {Kockelman 2003:28}

b. n-w-**inw**-aj [t-**in**-xik sa' li k'ayil]
INC-B3S-A1S-want FUT-B1S-go inside the market
'I want to go to the market' (or 'I want [that] I will go to the market')
{Kockelman 2003:28}

Craig states that the distinction between complements with complementizers as in (11a) and complements without complementizers as in (11b) in Popti' has to do with epistemic information. The complementizer introduces an expected, supposed, or believed fact as in (11a), whereas a finite complement without complementizer is selected by verbs of desire as in (11b). The example in (11b) shows that coreference of subjects is not required in this type of complement, unlike in Tz'utujil and Q'eqchi'.

(11) a. ham walni [**tato** ay mac chuluj]
I thought that is who will come
'I thought that somebody was coming.' {Craig 1977:234}

b. ay wala' [(**tato**) chach wayi]
I would like that you sleep
'I would like for you to sleep.' {Craig 1977:234}

K'iche', too, has finite complements both with and without complementizers. Larsen (1988:392) indicates that the presence of the complementizer has to do with the expression of the NP complement subject. In (12) there is no

complementizer and the subject of the complement is not expressed by an NP, whereas in (13) there is a complementizer and the complement subject, which is preverbal, is expressed by an NP.

(12) are' x-ø-r-aa-j [x-ø-in-b'an-o]
PRO3S COM-B3S-A3S-want-ACT COM-B3S-A1S-make-SS
'He wanted me to do it.' {Larsen 1988:392}

(13) k-ø-aw-aa-j [**chi ri a Xwaan** ka-ø-b'ee-k]
INC-B3S-A2S-want-ACT COMP DET CL John INC-B3S-go-SS
'I wanted John to go.' {Larsen 1988:392}

Larsen also relates the presence or absence of the complementizer to the matrix verb. He indicates that some verbs take finite complements with complementizers such as *b'iij* 'say/tell', but that other verbs such as *chomaaj* 'think' can take a complement clause either with or without a complementizer.

Past authors have also disagreed on whether the two types of finite complements should be regarded as one construction or two. Finite complements with or without complementizers are been analyzed as variants of the same type of complement by Larsen (1988) in K'iche' and Craig (1977) in Popti'. In other work they have been analyzed as separate types, for instance by Dayley (1985) in Tz'utujil, and Kockelman (2003) in Q'eqchi'.

In this study I propose that in K'iche' finite complements without complementizers are structurally a separate type of complement, although they share many properties with finite complements with complementizers. In Chapter 3 (§3.3), I show that the internal structure of a finite complement without a complementizer is different from the internal structure of a finite complement with a complementizer. One difference concerns pre-verbal (non-focused)

subjects, which are possible in a finite complement with a complementizer but not in one without a complementizer. Another difference is that finite complements without complementizers show restrictions on TAM and referentiality which are not found in finite complements with complementizers. I will argue that these restrictions reflect the dependence of the complement on the matrix predicate. Finally, I will show that the two types of finite complement are selected by different matrix predicates.

I will also address an alternative analysis for finite complements without complementizers: that they are not subordinate clauses, but are in a paratactic relation with the main verb. Such an analysis is proposed by Bohnemeyer (2002:93) for Yucatec. Bohnemeyer argues that embedding is not possible for finite complements, but that it is restricted to what in this study I am calling non-finite complements. In Chapter 3 (§3.3) I show that this analysis cannot be correct for K'iche'. There is evidence that finite complements without complementizers cannot be in a paratactic construction, but instead are subordinate clauses to the matrix predicate.

2.3. Non-finite complements

Non-finite clauses lack TAM marking. From the literature on Mayan languages, we know that non-finite complements can come in two types: those which lack person marking for the subject (usually called "infinitives"), and those which lack aspect but do have person marking for the subject (usually called "aspectless" complements). We will see that K'iche' only has the former type. Below I exemplify the two types in Q'anjob'al: aspectless in (14) and infinitive in (15).

(14) x-ø-y-il ix [ha-way-i]
COM-B3S-A3S-see CL A2S-sleep-IV
'She saw you sleeping.' {Mateo Toledo, 2013:247}

(15) x-ach y-uqtej-toq ix [man-oj jos]
COM-B2S A3S-follow-DIR CL buy-INF egg
'She sent you to buy eggs.' {Mateo Toledo, 2013:247}

Languages which permit both types of non-finite clause are found in the Mamean, Q'anjob'alan, Cholan, and Yucatecan branches. K'iche' only has one type: the infinitive. Therefore in this dissertation I will not deal with the aspectless type.

There are several important issues about infinitives in Mayan languages (Aissen 2014). One is the extent to which they are nominalized. In this study I show that infinitive clauses in K'iche' share many of the internal and external syntactic properties of NPs. For instance, in (16) the NP, *le nuq'ab'* 'my hand', corresponds to the subject. In (17) the non-finite verb fills the same slot as the NP in (16).

(16) ø utz [le nu-q'ab']$_{NP}$
B3S good DET A1S-hand
'My hand is good.'

(17) ø utz [wa'-iim]$_{VN}$
B3S good eat-VN
'It is good to eat.'

At the same time, non-finite forms are based on verbal predicates and show the full argument structure of the verbal base. In (18) the non-finite verb has a direct object *le paas* 'the belt'. Its subject is controlled by the matrix subject, the NP *le ixoq* 'the woman'.

(18) x-ø-u_i-maj [u_j-keem-ik le $paas_j$] le $ixoq_i$
COM-B3S-A3S-begin A3S-weave.PASS-VN DET belt DET woman
'The woman began to weave the belt.'

Another important issue is that while all Mayan languages have infinitives of intransitive verbs, many lack infinitives of transitive verbs, as Polian (2013) and Aissen (2014), among others, have pointed out. Admittedly, in some cases transitive infinitives have been reported, as in Tz'utujil (Dayley 1985), and in Popti' (Craig 1977). But crucially, even these "transitive" non-finite forms have important properties that are associated with antipassive verbs. For instance, Tz'utujil can have a transitive non-finite form, but its object must be a bare noun phrase (more like an antipassive with incorporated object), as in (19).

(19) x-ø-qa-maj [choy-oj chee']
COM-B3S-A1P-begin cut-VN tree
'We began to cut trees.' {Dayley 1985:393}

In Mam it is also possible to express a direct object of an infinitive, but just like Tz'utujiil and Popti' it must be non-specific, as in (20a). When it is specific then it is expressed as an oblique, as in (20b).

(20) a. ma tz'-ok n-q'o-'n-a [tx'eema-l sii']
RECI B2S-DIR A1S-give-DS-LS/2S cut-INF firewood
'I made you cut wood.' {England 1983:300}

b. n-chi ku' teen xjaal [belaara-l **t-e** jun weech]
PROG-B3P DIR be person watch-INF 3S-RN/PAT one fox
'The people began to watch the fox.' {England 1983:300}

In contrast with the languages discussed above, some languages, including Tseltal and K'iche' (as well as other K'ichean languages), have innovated a non-finite form that can take a full direct object. A K'iche' example is in (21) and a Tseltal example in (22).

(21) x-ø-u_i-maj [u_j-keem-ik le paas$_j$] le ixoq$_i$
COM-B3S-A3S-begin A3S-weave.PASS-VN DET belt DET woman
'The woman began to weave the belt.'

(22) ya j-mulan-ø [s-jot'-el j-jol]
INC A1-like-B3 A3-scratch-NF.PASS A1-head
'I like to scratch my head.' {Polian 2013:349}

Superficially both languages seem to use the same mechanism. For instance, in both cases the non-finite verb form bears a Set A marker. However, they are not the same. In Tseltal, the Set A marker is restricted to third singular; other persons are ungrammatical, as shown in (24) where there is second person singular.

(23) *ya j-mulan-ø [**a**-jot'-el]
INC A1-like-B3 A2-scratch-NF.PASS
Intended reading: 'I like to scratch you.' {Polian 2013:350}

To express the intended meaning of (23) it is necessary to use another verb form where both arguments of the complement verb get marked on the verb. This verb does not take an aspect marker, as in (24).

(24) ya j-mulan-ø [j-jot'-bel-at]
INC A1-like-B3 A1-scratch-NF.TR-B2
'I like to scratch you.' {Polian 2013:351}

Polian (2013) states that this person marker does not index the object but is an indication of transitivity. In K'iche', however, the Set A marker can be any person and therefore it indexes the direct object.

(25) x-ø-r_i-eta'ma-j [$_i$**aw**$_j$-iil-iik]
COM-B3S-A3S-start A2S-see.PASS-VN
'S/he learned to take care of you.'

All of this raises the question of whether this form in K'iche' can be analyzed as truly transitive. Past authors have not analyzed it this way, but have described it as a passive: Larsen (1988) and López (1997) both say that it is a nominalized passive form which can take a Set A marker as a possessor, and Larsen says that the Set A marker shows agreement with the semantic patient or theme which is the syntactic subject of the passive verb form. In this study I will argue that the form in question is syntactically transitive, although it does have the morphology of a passive form.

The last syntactic issue I will discuss here involves control, which is important especially when the subordinate clause is non-finite, but also when it is finite. There is very little work in Mayan languages concerning conditions on controllers. The exception is England (1983) on Mam, where she claims that ergative arguments cannot be controllers. In Chapter 3 (§3.4.3 and §3.4.4) I will propose a set of conditions on controllers in K'iche' for non-finite complement clauses, and in Chapter 6 (§6.3) I will show that these conditions account for surprising restrictions in non-finite purpose clauses as well.

2.4. Selection

In this study I propose three types of complement clause: finite complements with complementizers (CP-complements), finite complements without complementizers (IP or S-complements), and non-finite complements (in Chapter 3 §3.2, §3.3, and §3.4 I provide the details for each type of complement). An important issue in complementation concerns the principles by which a particular complement type is selected by a particular predicate. Typological work has shown that the selection of complement types is determined by the higher predicate (what Noonan 2007 calls the complement taking predicate, or "CTP") and by the semantic relation between the CTP and the complement.

We can see from Noonan's (2007) discussion of the classes of CTPs that some verb classes (utterance predicates and propositional attitude predicates, among others) take finite complements or "*that*-complements" in English; whereas other predicates (such as fear predicates, achievement predicates, and phasal predicates) usually take a kind of non-finite complement. CTP's in the second group usually select complements that have some type of dependence on the matrix, usually with regard to *time reference* and/or *referentiality*.

Most studies on complement clauses in Mayan languages do not include a systematic study of CTP properties and complement selection. The exception is Kockelman (2003) who takes up this issue in his work on complementation in Q'eqchi'. Kockelman proposes that there are three types of complement in Q'eqchi': full-clause complements, non-finite complements, and nominalized complements. Kockelman proposes nine classes of CTP; he shows that each class selects one or more types of complement, and that "the closer the semantic relation between the narrated events denoted by a predicate and its complement, the more the morphosyntactic encoding of the predicate-complement construction appears as a single clause" (Kockelman 2003:25).

Kockelman shows that transitive and intransitive aspectual verbs, purposive movement, intransitive affectual, and jussive verbs only select non-finite or nominalized complements. These are the complements that are more tightly connected to the matrix predicate. Psych-action verbs and perception verbs can select any of the three complement types, and this means that some of the complements can be bound more tightly to the matrix, but others are not. And cognition, propositional-attitude, and speech verbs select full clauses, with some exceptions (some verbs of these classes can select non-finite or nominalized complements). This last group of matrix verbs usually selects complements that are independent from the matrix.

Table 1.3. Complement taking predicates in Q'eqchi'

CTP's	**Complement type**
Aspectual Purposive Affectual Jussive verbs	non-finite complements nominalized complements
Psych-Action Perception	full-clause complements non-finite complements nominalized complements
Cognition Propositional attitude Speaking verbs	full-clause complements (non-finite and nominalized complements)

In Chapter 5 I will take a similar approach to complement selection in K'iche'. We will see that in K'iche' there are matrix verbs that only select non-finite complements (such as phasal verbs); and there are matrix verbs that only select finite complements (such as verbs of propositional attitude, verbs of knowledge, and verbs of communication, among others). But there are also matrix predicates that can select any of the three types of complements identified in this study, and the selection of the complement is based not only on coreference, but also on temporal reference and pragmatic factors.

3. Purpose clauses

My approach to purpose clauses will be guided both by typological work (Schmidtke 2009) and by the structural properties of purpose clauses in K'iche'. Previous analyses of purpose clauses in Mayan languages are less deep than those of complement clauses. Polian et al. (2015) show that Tseltal and Q'anjob'al have

two related structures, one for canonical purpose clauses and another for "destinative" meaning ('make something available so that the event in the purpose clause/subordinate clause can be carried out'). Such a difference is not structurally present in K'iche'. Still, there are at least two types of purpose clauses reported in K'ichean languages.

García Matzar and Rodríguez Guaján (1997) indicate that purpose clauses in Kaqchikel are finite and are introduced with a relational noun. The purpose clause can have incompletive and potential TAM, and there must be coreference between an argument of the matrix clause and an argument of the purpose clause. For Tz'utujil, Dayley (1985) indicates that purpose clauses are non-finite clauses, and therefore they display control relations. Interestingly, Dayley's examples mainly include intransitive verbs of motion as the matrix predicates.

In K'iche', on the one hand, López (1997) says that purpose clauses are finite clauses, introduced by the relational noun *-eech*. She shows that finite purpose clauses can have incompletive and potential TAM.

(26) x-e-pet-ik [**r-eech** k-e-wa' iw-uuk']

COM-B3P-come-SS A3S-RN INC-B3P-eat A2P-RN

'They came to eat with you.' {López 1997:440}

In the discussion of complement clauses, López points out that intransitive verbs of motion take non-finite clauses as complements, but it is unclear for her

[2] In the K'iche' of Santa Lucía Utatlán, López's example sounds odd. Speakers change from of the subordinate verb from finite to non-finite, and this seems to be due to the coreference of subjects:

(i) x-e-pe [pa **wa'-iim** iw-uuk']

COM-B3P-come PREP eat-VN A2P-RN

'They came to eat with you.'

whether these clauses are complements or purpose clauses. On the other hand, Larsen (1988) compares nonfinite purpose clauses to nonfinite complement clauses and he points out that there are many properties in common. (27) is an example of non-finite purpose clause.

(27) k-e-b'ee [**pa** wa'-iim]
INC-B3P-go PREP eat-VN
'They are going to eat.' {Larsen 1988:415}

Larsen indicates that there are also finite purpose clauses that are introduced by the relational noun *-eech*.

In this study I will develop those accounts further by showing that with respect to various syntactic phenomena, finite purpose clauses behave like finite complements (with complementizers) and non-finite purpose clauses behave like non-finite complements. However, I will show that there is motivation for identifying finite purpose clauses as adjuncts (not complements) based on extraction restrictions (Chapter 4). Interestingly, non-finite purpose clauses do not exhibit the same restrictions. They pattern almost entirely like non-finite complements and might be considered non-finite complements (as Kockelman 2003 proposes). However, in this study I will argue that non-finite purpose clauses are adjuncts, not complements, since they are not selected by the matrix predicate.

I will deepen the resemblance between non-finite purpose clauses and non-finite complement clauses by considering an unexpected restriction on non-finite purpose clauses: subject control is ungrammatical when the matrix is transitive. I will argue that this arises from restrictions on control which are shared with non-finite complement clauses and are particular to K'iche' (or at least, not shared with English or with Mam).

Finally, there is a third type of purpose clause which has not been identified before. It is finite, but is not introduced by a subordinator or complementizer. Superficially, therefore, it resembles a finite complement without complementizer.

(28) x-**oj**-peet-ik [x-ø-ol-**qa**-k'am-a']
COM-B1P-come-SS COM-B3S-MOV-A1P-receive-DEP
'We came to take her.'

I will provide a description of this construction and will propose that this type of purpose clauses involves parataxis, that it is not embedded in the matrix clause, but it is connected in a paratactic relation.

4. Summary

In this study I propose three types of complement clause and three types of purpose clause. Finite complement clauses with complementizers share many properties with finite purpose clauses introduced by a subordinator. But the purpose clauses are true adjuncts and the complement clauses are arguments. Non-finite complement clauses and non-finite purpose clauses are very close, as Larsen (1988) has pointed out for K'iche' and Verstraete (2009) from a typological perspective. I will develop this view further. The parallelism breaks down between finite complement clauses without complementizers and finite purpose clauses without subordinators. I will show that the first are embedded, while the second are paratactic.

Table 1.4. Comparison between purpose and complement clause structures

	Complement clause type	**Purpose clause type**
i)	Finite complement clause with *chi* (CP-complements)	Finite purpose clause with *reech*
ii)	Finite complement clause without complementizer (S-complements)	Finite purpose clause without subordinator (Paratactic construction)
iii)	Non-finite complement clause	Non-finite purpose clause

5. Methodology

This study has involved bibliographical research related to complement and purpose clauses in K'iche', and in other Mayan languages. I also conducted fieldwork, in part to gather information and data specifically for the analysis of complement and purpose clauses in K'iche'. Below I give more information about the fieldwork I conducted in Guatemala.

5.1. Field work

The data that I use in this dissertation is mainly from the K'iche' spoken in Sololá, specifically in the communities of Santa Lucía Utatlán, Santa Catarina Ixtahuacán, and Nahualá (in the highlands). The reason that I use data from these communities is that they form a dialect area (although there may be differences between them), and I conducted fieldwork for the dissertation only in these communities.

In 2008 and 2009 I started conducting fieldwork in Sololá as a graduate student at the University of Texas at Austin. During this time I was recording texts of any genre. Some of the recordings I transcribed and translated into

Spanish. (This was partially supported by the Ford Foundation and the Sherser Fellowship).

In 2010 I began a specific documentation project: *Documentation of formal and ceremonial discourses in K'ichee'* (ELDP 0092). The goal of this project was to document formal and ceremonial discourses in natural contexts in three K'iche' communities listed above. The research outcomes were 30 hours of recorded texts in video and audio, 20 hours of transcription, 5 hours of analyzed or annotated texts (all of which will be deposited in ELAR and AILLA); 5000 entries in Toolbox; training of two native speakers in documentation methodology and grammatical analysis of K'iche'; and a collection of transcribed texts.

The recorded texts include the following topics: Mayan ceremonies (prayers, curing ceremonies, and so on), community meetings (small community committees, meetings of authorities), political meetings (parties meeting with people in the communities), weddings (including the process from the petitioning of the bride until the wedding), birthdays, and formal agreements (such as the distribution of inheritance), among others.

All these steps were also applied to another small project funded by the Lozano Long Institute of Latin American Studies at the University of Texas which was called the *Documentation of specialized discourses in K'ichee'* from 2010 to 2011. This basically included the same procedures as the larger project; the difference has to do with the outcomes. For this project there are 25 hours of recorded texts and 15 hours transcribed and translated to Spanish. The transcribed texts were not annotated.

The methodology of this research included working with individuals and groups who were previously contacted and asked for their consent. Below I describe briefly how each task was carried out.

5.2. Recording

A TASCAM DR-100 was used for audio-recordings, and a SONY HC7 for video-recording. In some cases it was necessary to use an external microphone. All recordings were digital; audio recordings were made in WAV format and later converted to MP3 files.

Video recordings were made in the MTS format and converted to MPEG, and the audio of these videos was also converted to .wav and .mp3. WAV files were used for transcriptions, and MP3 for making copies to distribute to speakers and institutions at the end of the project.

5.3. Transcription

The transcription was done in ELAN. Segments were meant to represent phonological phrases, and here is where files in WAV format were necessary, since it helps to see the waves when dividing the text in segments. Also, when there are two or more people interacting in the recording it was easy to identify their participation in ELAN since each participant gets his or her own line. After each text was transcribed, then it was revised and corrected, and then translated to Spanish.

5.3.1. Database

The database is in Toolbox. I first introduced individual words and morphemes, all taken from transcribed texts which were transferred from ELAN. Each entry contains information about the morpheme. In the example below I provide this information.

(29) \lx-lexeme ak’aal
\a-alternate for parse ak’al
\ps-part of speech n.
\gz-gloss child
\ng-notes (grammar) La segunda vocal ‘aa’ se acorta cuando el sustantivo no es el último elemento de la FN.

5.3.2. Annotation

Texts were annotated in Toolbox. The base to start annotating the text was the database. The annotation was semiautomatic after annotating around three hours of texts and close to 5000 entries (K’iche’ has allomorphy and also vowel dropping, and this made the annotation more complicated, since in many cases it was necessary to introduce many exceptions so that the program could choose or give the chance to choose between many options).

(30) \ref QUC011R01I001:008

\tx	tons	kojtzjon	kuk’	taq	ri’	rkopradiya
\mb	entonsa	k-oj-tzijo-n	k-uk’	taq	ri’	r-kopradiya
\gn	entonces	INC-B1P-contar-AP	A3P-SR	PL	DEMDET	-cofradía

\ft entonces platicábamos con los de la cofradía,
‘Then, we talked to the cofradía.’

5.3.3. The data

In this dissertation, I have attempted to take as many examples as possible from the texts. There were some types of examples that did not occur in the texts, but which I thought existed (because I can say them or have heard them). I checked these with other native speakers, especially ungrammatical examples.

Examples that come from the database are indicated by a numeric code indicating their source (beginning with the ISO language code “QUC” and the project number “011”, followed by a resource number beginning with “R” and an item number beginning with “I”). Examples that come from bibliographical resources are cited normally (by author, year, and page number) and I standardized all abbreviations; and examples that do not have any of these sources listed are elicited examples. I would briefly like to talk about the examples, first about the examples from the database to highlight some relevant properties that they have, and then about the elicited examples to explain why elicitation was necessary.

The database does not have examples of complement and purpose clauses with a variety of different matrix predicates. This means that there are examples of complement and purpose clauses in the database, but they usually occur i) with the same matrix verb, the most common ones being phasal verbs, verbs of knowledge, and intransitive verbs of motion; ii) in their declarative forms; and iii) in the same order: matrix clause, optional subordinator, complement or purpose clause. I did not make a statistical count for these constructions, but in general this is what I observed.

With that said, we can see that it would have been necessary to elicit examples i) with different matrix predicates; ii) with negation or interrogation, secondary predication and other elements being tested within the subordinate clause; and iii) in different orders. Therefore I elicited examples with those elements or properties, and some others that show very basic properties.

First of all I elicited ungrammatical examples. In natural speech, sometimes speakers make errors, which may or may not be ungrammatical, but which in any case they usually correct. In the database there are cases where people say things “wrongly” but in ways that are not necessarily ungrammatical, and in particular I did not always find the examples I needed to illustrate ungrammatical

constructions for complement and purpose clauses. Second, the occurrence of *wi* is common when a prepositional phrase is extracted; however, its double occurrence is not common, and in fact I did not find any example with the double occurrence (though this is in fact possible when extracting a PP from a finite CP complement). Third, it was necessary to elicit examples that included negation, extraction from the subordinate clause and the inclusion of other elements being tested in subordinate clauses. Finally, I also elicited examples where the matrix verb was an uncommon one, such as the verbs *k'amon* 'get used to' and *taqchi'j* 'force', among others.

It is not surprising that the style of the examples extracted from ceremonial discourses is more elaborated. For instance, adjectives and adverbs can be more frequent and therefore the sentences can be longer, among other things.

I have found it fascinating to use the database for this study, although I have not explored it in depth. There are many things that a native speaker could not think of while doing an analysis. For instance it would not have occurred to me that it is possible to have the paratactic construction that I propose in chapter 6 (§6.4) for purpose clauses, but I found it in a text and here it is!

The assessment that I present here does not account for the whole database, since it is still under construction. What I have said is based on conclusions that I have drawn from part of the database.

6. Organization of the dissertation

In Chapter 2 I will present an overview of the grammar that covers the most relevant points needed to understand the topics of this dissertation.

In Chapter 3 I will introduce complement clauses in K'iche', focusing especially on their form and internal structure. In this study I propose three types of complement clause: finite complement with complementizer, nonfinite

complement, and finite complement without complementizer. There is also an interrogative form for the finite complement, but this form behaves like the declarative finite form. These three types of complement also exist in other languages, and they have been reported in K'iche' as well, but many details remained to be discussed.

Finite complements with complementizers are the most independent type of complement clause. They are CP-complements and they have the structure of a simple independent clause. Finite complements without complementizers have a fully inflected verb, but no complementizer introduces them. Although they look like independent clauses, they are unlike independent clauses in that they show some degree of dependence on the matrix clause, especially with regard to TAM and referentiality

Nonfinite complement clauses are the most dependent type. Non-finite complements do not bear TAM and therefore they are dependent on the matrix for their time reference. They also do not have an expressed subject. The covert subject must be identical to one argument in the matrix clause. That is, they require structural control. In this chapter I also discuss a limited number of non-verbal predicates that take nonfinite complement clauses. These non-verbal predicates are mainly evaluative adjectives. The most relevant point here is how the arguments are realized. With a subgroup of evaluative adjectives the experiencer can be realized as a subject or as an oblique. Finally, in Chapter 3 I introduce the use of the transitive verb *b'an* 'make/do' as a complement-taking light verb.

Chapter 4 presents more distinctions between finite and non-finite complement clauses, mainly with regard to their external syntax. Here I will discuss differences between the three types related to intonational phrasing, movement of the complement, and extraction from the complement. An interesting difference has to do with extraction of a locative from the complement.

In K'iche', when a locative is moved to focus position, the particle *wi* occurs after the verb or predicate. Here the distinction between the three types of complement is very clear. *Wi* appears once (and on the complement verb) when the complement is an S-complement; it appears twice (on both verbs) when the complement is a CP-complement; and it appears once (on the matrix verb) when the complement is non-finite.

In Chapter 5 I present an inventory of verbs that select complements. I basically follow Noonan's classification, but I put the verbs in groups based on the type of complements they select in K'iche'. Also, in this chapter I present restrictions on the complement that are not syntactic restrictions, but rather lexical restrictions that come from the matrix verb; and I present examples of verbs whose meanings change depending on the type of their complement.

Chapter 6 contains a description and analysis of purpose clauses in K'iche'. In this chapter I propose three types of purpose clause corresponding to the three types of complement clauses. Finite purpose clauses resemble independent clauses, except that usually they can only take incompletive TAM and show some adjunct-like behavior. Non-finite purpose clauses closely resemble non-finite complement clauses, except that they are not arguments of the matrix verb. Finite purpose clauses without subordinator are paratactic rather than embedded.

Chapter 7 contains the conclusions of the study and some questions for future research.

Chapter 2

Overview of grammar

2.1. Introduction

This chapter contains information about aspects of K'iche' grammar that will be relevant to the discussion of the main topics of this study, namely complement and purpose clauses in K'iche'. For the most part this chapter does not present major new results, but it does extend and add detail to grammatical escription found elsewhere.

Typologically, K'iche' is a verb initial language — specifically, a VOS language (Kaufman 1990) — although it is rare to find VOS order in discourse, where usually only one argument is expressed by an NP. An example of this order taken from a text is in (1).

	V	O	S	
(1)	x-ø-u-yup-ub'a	u-wach	ra'chi	ka-ø-cha',
	COM-B3S-A3S-close-TR	A3S-eye	DET.man	INC-B3S-say

'The man closed his eyes, they say…'

{Can Pixabaj and England 2011:17}

K'iche' is a head marking language. Thus arguments of a predicate are marked on the head (verbal or nonverbal predicate) and the possessor marker is on the possessed noun, as the examples above show. K'iche' is morphologically

and syntactically ergative. Transitive subject agreement is marked on the verb using a set of ergative markers known as Set A in the Mayanist literature, while intransitive subject and transitive object agreement are marked using a set of absolutive markers known as Set B. Set A markers are also used to mark what are formally the possessors on nouns, relational nouns, and verbal nouns, though in some cases these are not syntactically possessors. For instance, Set A marks the complements of relational nouns (relational nouns are nouns that are possessed and they are introduce semantic roles and some of them introduce subordinate clauses). And as we will see, it also marks arguments of certain verbal nouns.

Transitive verb

(2) x-oj-**ki**-chap-o
COM-B1P-A3P-grab-SS
'They grabbed us.'

Possession

(3) **qa**-wuuj
A1P-book
'Our book'

Relational noun complements

(4) **aw**-umaal
A2S-RN:by
'by you'

Verbal noun arguments

(5) **q**-iil-iik
A1P-see.PASS-VN
'Our being seen.'

Set B markers are used to mark the direct objects of transitive verbs, the subjects of intransitive verbs (including passive and antipassive verbs), and the subjects of nonverbal predicates.

Object of a transitive verb

(6) x-**oj**-r-il-o
COM-B1P-A3S-see-SS
'S/he saw us.'

Subject of an intransitive verb

(7) x-**oj**-b'iin-ik
COM-B1P-walk-SS
'We walked.'

Subject of a passive verb

(8) x-**oj**-iil-ik
COM-B1P-see.PASS-SS
'We were seen.'

Subject of an antipassive verb

(9) x-**oj**-pixab'a-n-ik
COM-B1P-give.advice-AP-SS
'We gave some advice.'

Subject of a nonverbal predicate

(10) **oj** waqib' ixoqib'
B1P six women
'We women are six' or 'there are six of us women'

In addition to the morphological ergativity described above, K'iche' also exhibits syntactic ergativity in its treatment of movement. The subject of a transitive active verb can only undergo movement if the verbal form is changed from active to antipassive. In (11a-b) the agent is focused, in (11c) the agent is questioned, and in (11d) the agent is relativized. In all of these cases the verb has to be changed to antipassive. Later in this chapter (§2.9.2) I present the different types of antipassive and the agent focus voice.

(11) a. **are ri ali** x-ø-loq'-**ow** r-eech ri wuuj
Patient
FOC DET girl COM-B3S-buy-AP A3S-RN DET book
'It was the girl who bought the book.'

b. **are** ri ixoq x-ø-q'aalu-**n** r-eech ri nee'
Patient
FOC DET woman COM-B3S-hug-AP A3S-RN DET baby
'It was the woman who hugged the baby.'

c. **jachin** x-ø-tzaq-**ow** r-eech?
who COM-B3S-loose-AP A3S-RN
'Who lost it?

d. ri achi, **ri** x-ø-mes-**ow** le ja
DET man REL COM-B3S-sweep-AP DET house
'The man who sweept the house.'

In K'iche' there is a distinction in the second person between ordinary and honorific or formal agreement markers, both for singular and plural. The second person formal marker is an enclitic: it comes after the noun for which it marks a possessor, or after the predicate for which it marks an argument. The use of the formal or honorific second person is governed by social rules: it is used to address people that have a higher social status than the speaker, or between people of equally high status in formal situations. The forms are the same in contexts where Sets A and B are different for other persons.

In Tables 2.1 and 2.2 I present the forms of the Set A and Set B markers:

Table 2.1. Ergative or set A Markers

Number	**Person**	**Before Consonants**	**Before Vowels**
Singular	1st.	*nu-, in-*	*w-, inw-*
	2nd.	*a-*	*aw-*
	2nd.F	*=la*	*=la*
	3rd.	*u-*	*r-*
Plural	1st.	*qa-*	*q-*
	2nd.	*i-*	*iw-*
	2nd.F	*=alaq*	*=alaq*
	3rd.	*ki-*	*k-*

Table 2.2. Absolutive or set B Markers

Number	Person	Markers
Singular	1st.	*in-*
	2nd.	*at-*
	2nd.F	*=la*
	3rd.	*ø*
Plural	1st.	*oj-*
	2nd.	*ix-*
	2nd.F	*=alaq*
	3rd.	*ee-, e-*

2.2. Simple clause structure

In addition to the primary predicate and its associated arguments, finite clauses in K'iche' can include the following elements: topic, focus, negation, interrogation, secondary predicates, adverbs, adjuncts, and directionals. The availability of these elements may vary depending on the predicate. For instance, secondary predicates can only be found when the primary predicate is a verb.

In (11) I exemplify a simple clause where the predicate is a verb. The head of the predicate is a ditransitive verb *ya'* 'give'. This clause includes negation, a direct object, and an indirect object.[1]

[1] Set B3 plural, *e*, seems more like a pluralizer in this case, unless I analyze each noun with the set B: *e qataat e qanaan* as a headless relative clause as an option that Velleman (2014:28) suggests. For now, I gloss B3 plural e as a pluralizer.

	Verb and negation		DO			IO	
(11)	**na**	**x-ø-u'-ya'**	**ta**	nim-aq	taq eqale'n	ch-k-e	kan
	NEG	COM-B3S-A3S-give	IRR	big-PL	PL charges	PREP-A3P-RN	DIR
	e	qa-taat	e	qa-naan...			
	PL	A1P-father	PL	A1P-mother			

'S/he did not give charges to any of our grandparents.'

{R117I005:050-51}

In (12) there is an example of a simple clause headed by a nonverbal predicate. The predicate is composed of the positional root *t'uy* 'sit' and the derivational suffix *–ul*. This predicate has a subject that is indexed on the predicate by a Set B marker, as well as a directional and a locative adjunct.

	Positional	DIR	Locative adjunct		
(12)	e t'uy-ul	ulo	pa	le	ch'iich'
	B3P sit-PRED	DIR:to.here	PREP:in	DET	vehicle

'They came sitting down in the vehicle.'

The order of elements within the clause is the following: directionals come after the predicate, adjuncts are usually clause-final, adverbs can be clause-initial or final; topic and focus have pre-verbal positions, and topic precedes focus (details will be found in §2.10).

In the following subsections I provide more detail on each type of phrase in K'iche', and the elements they can include.

2.3. NP elements

A noun phrase is headed by a noun, which can be both preceded and followed by modifiers. There are several modifiers that nouns can take. The modifiers that precede a noun are determiners,[2] affective words (sometimes followed by a plural particle), numerals, and adjectives (which can also followed by a plural particle), in that order.

(13) ri s-taq[3] keb' yowab' taq **tz'i'**
DET AFFE-PL two sick PL dog
'the two poor sick dogs'

The most common modifiers that follow their head noun are relative clauses and possessor NPs. Demonstratives can also occur after a noun as well as before, as shown by the position of *rii'* in (14).

possessee NP possessor NP
(14) Ri' ri keb' nim-aq taq r-aal **ri ixoq rii'**.
DEM DET NUM big-PL PL A3S-son DET woman DEM
'Those two sons of that woman.'

[2] In K'iche' there are three definite determiners: *ri, le,* and *we*. The distinction between them is related to the definiteness and the familiarity of the referent, and its proximity and visibility to the speaker, but I will not discuss these differences further.

[3] The fact that there are two plural particles in this example seems to be due to the presence of the affective word. If the noun is plural and there is both an adjective and an affective word in the phrase, the plural particle must be repeated after the affective word and again between the adjective and the head noun.

When the possessor NP is overt it appears after the possessed noun. The possessed noun bears a Set A marker which agrees with the possessor. The structure of nominal possession will be relevant for the discussion of non-finite complement clauses, especially the transitive reanalysis of a type of verbal noun that has passive morphology. This type of verbal noun has to have a Set A marker, which is indexed to an NP that corresponds to the semantic patient or undergoer. This is discussed further in Chapter 3 (§3.4.3).

In (15) the modifier of the noun is a relative clause that comes in post-nominal position. Later in this chapter (§2.11.1) we will see more details on relative clauses in K'iche'.

(15) ri ixoq [**ri x-ø-pe** **Chwitz'aaq**] x-ø-ul-ik
DET woman REL COM-B3S-come Totonicapán COM-B3S-arrive-SS
'The woman who came from Totonicapán, arrived.'

2.4. Types of predicates and their elements

In K'iche' there are two types of predicates, verbal and non-verbal predicates. The main difference has to do with TAM marking on those predicates. Verbal predicates have TAM markers, whereas non-verbal predicates do not.

2.4.1. Nonverbal predicates

There are at least five word classes that can function as a head of a nonverbal predicate. These word classes are:

(16) a. positionals
b. nouns
c. adjectives
d. numbers
e. relational nouns

I will start by describing the positional predicates. Positionals form a productive root class in K'iche' and other Mayan languages. Can Pixabaj and Sis Iboy (2004) have counted more than 300 positional roots in K'iche'.[4] One of the most common uses of positionals is in nonverbal predicates, formed from a positional root plus a derivational suffix whose allomorphs are *–Vl* and *–Vn*.[5]

The example in (17a) has the positional root *t'uy* 'sit' and the derivational suffix *-ul* that forms the predicate. This predicate is modified by a directional and it also has a locative adjunct. In the exmples in (17) the positional carries the Set B first person plural marker *oj* which is like a proclitic.[6] Positionals can take a

[4] This type of root takes up to eight different class-specific derivational affixes.

[5] The rule is that *-Vn* is used when the second consonant of the root is *l*, while *-Vl* occurs in all other cases.

(i) tzal-**an**-ik 'leaning'
pak'-**al**-il 'face up'
k'ar-**al**-ik 'half-open'

[6] In this case the Set B marker is more like a proclitic than an affix because there are elements that can come between Set B and the predicate. An example is the irrealis particle, although this is not the most common way to negate this sentence:

(ii) **na** oj **ta** t'uy-ul ulo pa le ch'iich'
NEG B1P IRR sit-PRED DIR PREP DET vehicle
'We did not come sitting in the vehicle.'

status suffix which is *-ik* in (17b). The discussion of status suffixes is in (§2.4.2.2) in this Chapter.

	Positional	DIR	Locative adjunct		
(17) a.	oj t'uy-ul	ulo	pa	le	ch'iich'
	B1P sit-PRED	DIR:to.here	PREP:in	DET	vehicle

'We came sitting down in the vehicle.'

b. oj t'uy-ul-**ik**
B1P sit-PRED-SS
'We are sitting down.'

Nouns, adjectives and numbers can also head a nonverbal predicate. These, too, show agreement with the subject.

Noun

(18) e **winaq**
B3P people
'They are people.'

Adjective

(19)	e	**nim-a'q**	chi	le	ak'alaab'
	B3P	big-PL	PART	DET	children

'The children have grown up (got bigger).'

Number

(20) oj **waqib'** ixoqib'
B1P six women
'we women are six' or 'there are six of us women'

Finally, the relational noun *–eech* which denotes possession can head a nonverbal predicate. Relational nouns in K'iche' usually have a Set A marker. (See §2.5 for a detailed discussion of relational nouns.) To this form it is only necessary to add a Set B marker that is indexed to the subject.

(21) e_i **w-eech** kan le ak'$_i$
B3P A1S-RN:possession DIR DET chicken
'The chickens were mine (when I left them).'

Clauses headed by non-verbal predicates have topic and focus positions. The example below shows that the sentence has a topic NP and a focused adjunct; both are preposed to the predicate head.

	TOP	FOCUS			Positional	DIR	
(22)	le winaq	pa	le	ch'iich'	e t'uy-ul	lo	wi
	DET people	PREP	DET	vehicle	B3P sit-PRED	DIR:to.here	FOC

'It was in the vehicle that the people came sitting down.'

2.4.2. Verbal predicates

A verb in K'iche' can be intransitive or transitive. An intransitive verb, in addition to its stem, has TAM prefix, a Set B agreement prefix (subject agreement), a status suffix, and it can optionally include an element of movement.

Besides of these elements, a transitive verb, includes a Set B agreement prefix (object agreement), a Set A agreement prefix (subject agreement). Bellow I discuss these elements.

2.4.2.1. Time, aspect, mood (TAM)

Verbal predicates, unlike nonverbal predicates, have an obligatory TAM marker. In the table below I present the forms and allomorphs of the TAM markers. Some TAM markers in K'iche' can indicate both tense and aspect; for example, the morpheme *x-* is indicates both past tense and completive aspect (Larsen 1988).[7] The TAM marker *k-/ka-* seems to indicate only aspect: either incompletive or habitual (a verb with the TAM marker *k-/ka-* can also be combined with the progressive marker *tajin* but it is not relevant in this study). The imperative/exhortative is indicated by the prefix *ch,-* which occupies the same slot as *x-* and *k-/ka-*. The negative form of the imperative is *m-/ma-*, and it is j- when the verb includes movement In Table 2.3 I summarize these forms:

[7] Larsen (1988:164-68) states that *k-/ka-* can indicate incompletive (imperfective), progressive, and habitual, but does not indicate tense. However, *x-* completive (perfective) indicates past tense as well as aspect. Since several markers indicate the imperative mood, the designation TAM is used to cover all the functions of these markers.

Table 2.3. TAM markers

TAM marker	**Category**
x-	past/completive
k- (before vowels)	incompletive/habitual
ka- (before consonants)	
ch-	imperative
j-	imperative with incorporated movement
m- (before vowels)	negative imperative
ma- (before consonants)	

Below I exemplify the occurrence of the markers with different types of verbs.

Completive

(23) a. **x**-oj-b'iin-ik
COM-B1P-walk-SS
'We walked.'

b. **x**-ø-qa-tij-o
COM-B3S-A1P-eat-SS
'We ate it.'

Incompletive

(24) a. **k**-oj-b'iin-ik
INC-B1P-walk-SS
'We walk.'

b. **ka**-ø-qa-tij-o
INC-B3S-A1P-eat-SS
'We eat it.'

Imperative and negative imperative

(25) a. **ch**-at-b'iin-oq
IMP-B2S-walk-DEP
'Walk!'

b. **j**-ø-a'w-il-a'
IMP-B3S-MOV.A2S-see-DEP
'Go see it!'

c. **m**-at-b'iin-ik
IMP-B2S-walk-SS
'Don't walk!'

2.4.2.2. Status suffixes

Another set of affixes which appear on verbal predicates are called status suffixes. Except for positionals, they do not occur on non-verbal predicates. These suffixes convey mood and transitivity. There are two status categories in K'iche': simple and dependent.[8] A verb has dependent status if it is volitive (imperative, optative, hortative) or if it includes a movement element.

[8] Kaufman (1990:72) considers the perfect suffixes *-oom* and *-inaq* to be status suffixes, but I analyze them simply as suffixes which derive the perfect form of the verb.

In addition to the status category of the verb, there are two factors that determine the form of a status suffix. The first factor is a distinction between two classes of transitive verbs: *root* and *derived* transitives. Root transitive verbs have CVC roots with no additional derivational suffixes. Derived transitive verbs historically originate as a CVC root plus at least one derivational suffix (though in many cases the root is no longer known or productive). Root transitive verbs take status suffixes, while derived transitive verbs do not. The other factor is the verb's position in the sentence.

Table 2.4: Status suffixes II

Status	**Root transitive verb**	**Intransitive verb**
Plain	(-o/-u)	(-ik)
Dependent	-V'/-V	-a/(-oq)

Table 2.4 shows the two classes of status suffixes, plain and dependent, as they appear on root transitive verbs and on intransitive verbs. The suffixes in parentheses appear only when the verb occurs in clause final position. I discuss these suffixes in greater detail below.

The plain status suffixes are the following:

- *-o/-u* for root transitive verbs, *-u* occurs only following a root vowel *-u-* for vowel harmony, and *-o* in other cases
- *-ik* for all intransitive verbs and positional predicates

The plain status suffixes occur only in clause-final position. Henderson (2012) has analyzed these as being pronounced only when they occur in final position in the intonational phrase. In (26a) the suffix *-o* appears on the transitive verb *kuch'ob'o* since the verb is the last element in the clause, whereas in (26b) the suffix does not appear since the verb is followed by the subject NP.

(26) a. Jas nu k'u k-ø-u-ch'ob'-**o**
INT PART PART INC-B3S-A3S-think-SS
'Who knows what s/he thinks.'

b. Jas nu k'u k-ø-u-ch'ob' [sin k-aanma...]$_{NP}$
INT PART PART INC-B3S-A3S-think PART A3P-heart
'Who knows what their hearts wants.' {R012I002:167}

Similarly, (27) gives an example of the use of the plain status suffix *-ik* on an intransitive verb. In (27) the first intransitive verb *xokik* is in clause-final position, therefore it bears the status suffix *–ik*. , whereas on the second intransitive verb *xok* the status suffix does not appear since the verb is followed by more elements that belong to the clause.

(27) we k'u **x-ø-ok-ik**, we k'-na **x-ø-ok** ta
CND PART COM-B3S-enter-SSCND PART-NEG COM-B3S-enter IRR
pa r-sin ki-joloom
PREP DET-AFFE A3P-head
'Whether they understood or not.' {R036I002:082}

Derived transitive verbs do not carry status suffixes[9] but they show changes in non-final position:

- Vowels in the last syllable in derived transitive verbs are shortened in clause-non-final position, as in (28b).

(28) a. x-ø-r-eta'm**aa**-j
COM-B3S-A3S-learn-ACT
'S/he learned it.'

b. x-ø-r-eta'm**a**-j [wa'-iim]
COM-B3S-A3S-learn-ACT eat-VN
'S/he learned to eat.'

- The glottal stop on the suffix *-b'aa'* on transitive verbs derived from positionals is dropped in non-clause-final position, and the vowel is shortened, as in (29b).

(29) a. x-ø-u-t'uy-ub'**aa**'
COM-B3S-A3S-sit-TR
'S/he sat it down.'

b. x-ø-u-t'uy-ub'**a** le ak'aal
COM-B3S-A3S-sit-TR DET child
'S/he sat down the child.'

[9] Although most older works consider the *–j* to be a status suffix.

I now turn from plain status suffixes to dependent status suffixes. As mentioned above, dependent status suffixes appear in two contexts: i) when the verb bears an imperative marker, and ii) when the verb has an incorporated movement element. Like the plain status suffixes, the form of a dependent suffix varies depending on the conjugation class of the verb and the verb's position in the clause. Note though that one important different between the plain status suffixes and dependent status suffixes is that the plain status suffixes are *dropped* in non-clause-final position, whereas dependent status suffixes only change their form in this position. In Table 2.5 I list the dependent suffixes, and in the following examples I demonstrate their use.

Table 2.5. Dependent suffixes

Final position	**Non-final position**	
-oq	-a	intransitive verbs
-V'	-V	root transitive verbs

Imperative verbs

(30) a. ch-at-b'iin-**oq**
IMP-B2S-walk- DEP
'Walk!'

b. ch-at-b'iin-**a** pa le b'e
IMP-B2S-walk-DEP PREP DET street
'Walk in the street!'

(31) a. ch-ø-aw-il-a'
IMP-B3S-A2S-see-DEP
'Look at it!'

b. ch-ø-aw-il-a le ak'aal
IMP-B3S-A2S-see-DEP DET child
'Look at child!'

Incorporated movement

(32) a. x-in-**e'**-b'iin-**oq**
COM-B1S-MOV-walk- DEP
'I went to walk!'

b. x-ø-**i'nw**-il-**a'**
COM-B3S-MOV.A1S-see-DEP
'I went to look at it.'

We saw above that the dependent status suffixes are used on imperative verbs. But there is one exception to this: when the imperative appears in its negative form none of the dependent suffixes appear, instead the plain status suffixes are used.

Negative imperative

(33) a. m-at-b'iin-**ik**
IMP-B2S-walk-SS
'Don't walk!'

b. m-ø-aw-il-**o**
IMP-B3S-A2S-see-SS
'Don't look at it!'

2.4.2.3. Person markers

In Tables 2.1 and 2.1, I introduced the forms of set A and set B that mark subject and object agreement. I will discuss first set B as a marker of subject agreement on intransitive verbs.

Intransitive verbs mark only one argument, through set B for subject agreement. The intransitive verbal complex obligatorily includes a TAM marker, a Set B marker, the verb root or base, and a status suffix if appropriate. As explained above, the plain status suffix (*-ik*) only appears sentence-finally, at the end of an intonational phrase.

(34) x-**oj**-b'iin-ik
COM-B1P-walk-SS
'We walked.'

A simple clause headed by an intransitive verb can include: the subject (which may be in the topic or focus position), negation, a secondary predicate, a directional, adverbs, and adjuncts. In the following example the sentence starts with a topic, which is followed by the verb, a directional, and a locative adjunct.

	Topic	V	DIR	Adjunct
(35)	i sin Julya'n,	x-ø-kaanaj	kan	pa le kaye
	and AFFE Julián	COM-B3S-stay	DIR:remaining	PREP DET street

'…and don Julián, he stayed in the street.'

{Can Pixabaj and England 2011:18}

The next example (36) has a secondary predicate with negation and an NP that corresponds to the subject.

		2P°		1P°	NP
(36)	na	jup-ul-ik	ta	x-**e**-qaj	(la'k'alaab')
	NEG	face.down-PRED-SS	IRR	COM-B3P-go.down	DET.children
	'The children are not born face down.'				{R056I002:090}

2.4.2.4. Transitive verbs

A transitive verb bears a TAM marker, a Set B marker for object agreement, a Set A marker for subject agreement, the verb root or stem, and a status suffix if appropriate. Again, as explained earlier, the plain status suffix for root transitives (*-o*) only occurs sentence-finally at the end of an intonational phrase.

(37) x-oj-k-il-o
COM-B1P-A3P-see-SS
'They saw us.'

A simple clause headed by a transitive verb can also include the subject and object (either of which may function as the topic or focus), a secondary predicate, negation, directionals, adverbs, and adjuncts. The following example starts with a transitive verb and has an expressed subject.

(38)	x-oj-u-xib'i-j	le	jun	ch'o
	COM-B1P-A3S-scare-ACT	DET	one	rat
	'That rat scared us.'			

2.5. Prepositions and relational nouns

The strategy for introducing obliques is by using a preposition and/or a relational noun. In K'iche' there are two prepositions: *chi* and *pa*. These prepositions mainly introduce locative phrases, but combined with relational nouns they can introduce other thematic roles. Prepositions by themselves can introduce nominal adjuncts, as in (39).

(39) a. x-oj-'e **pa** ja
COM-B1P-go PREP house
'We went inside (the house).'

b. ch-ø-a-ya'-a kan **chi** ja
IMP-B3S-A2S-leave-DEP DIR PREP house
'Leave it at the door!'

Relational nouns are nouns that are possessed, they usually have a Set A marker. They can introduce oblique phrases that have thematic roles such as agent and patient, and others as shown in the list in (40). They can also introduce certain types of clauses (purpose clauses, for instance).

(40) a. -umaal agent ('by')
b. -eech patient or possessor
c. -iib' reflexive/reciprocal
d. -uuk' comitative/intrumental

Examples of some of these uses are shown below:

Agent oblique phrase

(41) x-ø-ch'aj-taj **q-umaal**
COM-B3S-wash-PASS A1P-RN
'It was washed by us.'

Instrumental phrase

(42) x-ø-u-kach' **r-uk'** le u-ware
COM-B3S-A3S-bite A3S-RN DET A3S-tooth
'S/he bit it with his/her teeth.'

As well as being used alone, prepositions and relational nouns may be combined to introduce locatives and other thematic roles. In Table 2.6, I present some combinations, the ones that will be relevant in this study, of prepositions and relational nouns, and the thematic roles they mark.

Table 2.6. Oblique arguments

	Preposition	**Relational noun**	**Thematic roles**
A	chi	-eech	benefactive/malefactive, goal/locative, source, instrument, addressee
B	chi	-wach/och/o	benefactive/malefactive, sustitutive, goal/locative
C	pa	-wi'	goal/locative

In (43) are examples of a preposition and a relational noun combined to introduce locatives.

(43) a. x-oj-paq-e' **p-u-wi** le ja
COM-B1P-go.up PREP-A3S-RN DET house
'We went on top of the house (roof).'

b. x-oj-'e **chi** **r-ij** le ja
COM-B1P-go PREP A3S-RN DET house
'We went around the house.'

When combinations of a preposition and relational noun are used to introduce thematic roles other than the locative, they do so in the context of a verb that takes more arguments than the verb itself can index. This includes intransitive verbs that take two arguments, and transitive verbs that take three. The argument not indexed on the verb is introduced as an oblique, like the various adjunct relations. In (44) I list the intransitive that take two arguments:

(44) a. *k'otochin* 'imagine'
b. *to'taj* 'finish'
c. *tane'* 'cease'
d. *ok/qaa*j 'start'
e. *k'amon* 'get used to'
f. *sachon* 'forget'
g. *na'taj* 'remember'

In (45) I list the formally transitive[10] verbs that take three arguments.

[10] Semantically these are ditransitive verbs since they assign three theta roles; however, formally they are transitive verbs since only two arguments are marked on the verb, and the third is peripheral.

(45) a. *ya'* ‘give’
b. *sipaaj* ‘give.gift’
c. *chi'aaj* ‘promise’
d. *suj* ‘offer’
e. *qaj* ‘borrow’
f. *k'as* ‘ask.for.credit’
g. *elaq'aaj* ‘steal’
h. *k'ut* ‘show/point’
i. *ya'* ‘allow’
j. *koj* ‘involve’
k. *taqchi'j* ‘force’
l. *q'il* ‘impede/prevent/stop’

For instance, in (46) the preposition and relational noun introduce the recipient. The recipient is the third argument and needs to be expressed as oblique since it is not indexed on the verb.

(46) x-ø-qa-sipa-j le ala's **ch-** le ak'aal
COM-B3S-A1P-give-ACT DET doll PREP-RN DET child
‘We gave the doll to the child.’

In some cases, the third argument is a complement clause. For instance in (47) the verb *ya'* ‘allow’ takes a third argument which is indicated by the preposition *pa*. This will be discussed in detail in Chapter 3.

(47) na k-oj-u-ya' ta [**pa** kuna-x-ik]
NEG INC-B1P-A3S-give IRR PREP cure-PASS-VN
‘S/he does not allow us to be cured.’

Some of the forms discussed in this section will come up in later discussion of subordinate clauses. For instance, *chi* and *pa* are prepositions which introduce non-finite complements; and *-eech* introduces finite purpose clauses.[11]

2.6. Adverbs and directionals

Temporal and locative adverbs are modifiers of predicates, and they usually occupy the last position in a clause, as in (48) through (50).

Locative adverbs

(48) re' k'as-l-ik taq ab'aj x-u'-yek lo ri Macario
DEM.B3P live-PRED-SS PL stone COM-B3P.A3S-lift DIR DET Macario
tza'm taq ri jyib', **tza'm taq ri taq'aaj**
RN PL DET mountain RN PL DET path
x-u'-mulii-j, x-u'-nuk' kan **waraal**
COM-B3P.A3S-collect-ACT COM-B3P.A3S-order DIR here
'Don Macario lifted the living stones from the mountains, from the path, he collected and ordered them here.' {R117I014:057}

(49) pwes x-ø-u-loq' ch-jub'iq' r-e **waraal**
PART COM-B3S-A3S-buy PART-a.bit A3S-RN here
'And s/he bought a bit, for himself/herself, here.' {R143I003:173}

[11] Applicatives and prolepsis are also strategies used to introduce a third argument, but since this is not relevant for this study, I will not discuss them further.

Temporal adverb

(50) por si ø tziij ø k'o nu k'u b'an-taj-naq **ojeer**
but AFI B3S true B3S EXS PART PART make-PASS-P formerly
'But it is true, something happened in the past.' {R134I001:146}

Manner adverbs usually occur at the beginning of a clause, as examples in (51) show.

(51) a. **no'jiim** ta b'a ka-ø-ki-k'oxomaa-j
slow IRR PART INC-B3S-A3P-understand-ACT
no'jiim ta b'a ka-ø-ki-chama-j r-iij,
slow IRR PART INC-B3S-A3P-think-ACT A3S-RN
'I hope they could understand it slowly, I hope they could think slowly.'
{R117I010:014}

b. pero **no'jimal** ø pet-naq loq,
but slow B3S come-PP DIR
'But it has been slow.' {R007I001:119}

Directionals also modify predicates, usually verbal predicates as in (52a), but they can also modify some non-verbal predicates, as in (51b).

(52) a. e... in k-ø-aw-aa-j ka-tzjo-j **b'i** la ch-w-e
e… PRO1S INC-B3S-A2S-want-ACT INC-tell-ACT DIR 2SF PREP-A1S-RN
'e... I would like you to tell me.' {QUC011R007I001:017}

b. oj t'uy-ul **ulo** pa le ch'iich'
B1P sit-PRED DIR:to.here PREP:in DET vehicle
'We came sitting down in the vehicle.'

2.7. Secondary predicates

Secondary predicate constructions in K'iche' are possible only when the primary predicate is a verb, either intransitive as in (53a) or transitive as in (53b). Secondary predicates are always non-verbal and they precede the primary predicate. In the example below the secondary predicate is a positional in (53a) and a noun in (53b).

			2P°		1P°
(53) a.	we	na	jup-ul-ik	ta	x-e-qaj-ik...
	CND	NEG	face.down-PRED-SS	IRR	COM-B3P-go.down-SS
	'If they are not born face down.'				{R056I002:090}

	2P°	1P°
b.	achi	x-at-w-il-o
	man	COM-B2S-A1S-see-SS
	'I saw you as a man.'	

In secondary predicate constructions only the primary predicate bears person markers. This lack of agreement marking on the secondary predicate is one of the distinguishing properties of this construction.[12]

2.8. Reflexive

The use of reflexives in K'iche' will be relevant for this study, especially in the discussion of non-finite complements in Chapter 3 (§3.4.3), where reflexives are allowable under certain conditions. I will first present general background on

[12] For more detail on secondary predicates in K'iche', see Can Pixabaj (2010).

reflexives, especially in English, following Kroeger (2004), and will then present how reflexives work in K'iche'.

Reflexive pronouns in English (*myself*, *yourself*, and so on) are special because their antecedent must satisfy certain grammatical restrictions. The following examples illustrate such conditions. The example in (54a) shows that the reflexive pronoun must agree in person, number, and gender with its antecedent, (54b) shows that the antecedent of the reflexive pronoun must be in the same minimal clause, and (54c-d) show that there are further conditions on the relation between the reflexive and the antecedent.

(54) a. My **brother** admires **himself**/*herself
{Kroeger 2004:89}

b. I told you that [Mary would blame *myself/*yourself/herself]
{Kroeger 2004:90}

c. John protected Mary **from herself**

d. *John protected herself from Mary.
{Kroeger 2004:93}

Kroeger (2004:94) states there are reflexive binding conditions in English which have to do with agreement, domain conditions, and prominence conditions. He proposes that the antecedent of a reflexive must outrank the reflexive on the following relational hierarchy.

Figure 2.1. Relational hierarchy in reflexives (Kroeger 2004:94)

MOST PROMINENT			LEAST PROMINENT
subject	> object	> oblique argument	> non-argument

Conditions such as agreement and domain also apply in K'iche'; however, the relational hierarchy seems to be different. The details of how reflexives work in K'iche' are somewhat different from English.

(55) x-ø$_i$-inw$_j$-il [w$_j$-iib']$_i$
COM-B3S-A1S-see A1S-REF
'I saw myself.'

In (55) there is an example of a reflexive clause in K'iche'. The reflexive in K'iche' is indicated by the relational noun *-iib',*[13] which is obligatorily possessed. As with other possessed nouns, the features of the possessor are marked on the reflexive noun by Set A. It is the possessor of the reflexive noun which is bound by the antecedent. Reflexive clauses headed by verbs are always transitive. The antecedent is always the subject and the reflexive is always the direct object. Given other facts about reflexives, agreement is normal. That is:

1. Since the subject of the reflexive clause is the antecedent, its features match those of the possessor of the reflexive noun. When the verb is finite, those features are marked on the verb by Set A.

[13] This relational noun is also used to indicate the reciprocal which is not relevant for this study.

2. Since the object of the reflexive noun is a possessed noun, it is always third person. Further it is always singular. Therefore it is marked by Set B3s, which is always *ø-* on a finite verb.

However, we will see that the facts of agreement look different in non-finite reflexive clauses, as will be discussed in Chapter 3.

In (55) the Set A marker on the verb is first person singular, and the Set A marker on the reflexive relational noun is also first person singular. In (56), the subject is third person plural, and the Set A markers on both the verb and the reflexive relational noun are third person plural. The Set B markers in both examples are third singular.[14]

(56) x-ø$_i$-k$_j$-atin-sa-j [k$_j$-iib']$_i$
COM-B3S-A3P-bathe-CAU-ACT A3P-REF
'They bathed themselves.' (reflexive)
'They bathed each other.' (reciprocal)

Reflexives do not occur with intransitive verbs or with most nonverbal predicates, as the following examples show. Notice that in (56) the transitive verb *atinsaaj* 'bathe', formed with a causative suffix, can be used in a reflexive; but in (57) its intransitive counterpart *atin* cannot be, nor can the nonverbal predicate *ixoq* 'woman' in (58).

[14] (56) is ambiguous between a reflexive or reciprocal reading, but the point is that the set B marker is always third singular.

Intransitive verb

(57) *x-in-atin w-iib'
COM-B1S-bathe A1S-REF
'I bathed myself.'

Nonverbal predicate

(58) *in ixoq w-iib'
PRO1S woman A1S-REF
'I am a woman myself.'

In conclusion, the reflexive pronoun only occurs with a transitive verb, and reflexive clauses are always transitive.

2.9. Voice alternations

K'iche' makes a distinction between active, passive, and antipassive voices, although there are also some remnants of the instrumental voice (for details see Mondloch 1981, Larsen 1988, among others). I will not discuss this voice further because it is not relevant for this study.

2.9.1. Passive voice

The passive voice refers to a process where a transitive verb becomes intransitive by morphological derivation (Larsen 1988). In this process, the object of the active verb, the semantic patient or undergoer, becomes the subject of the passive intransitive verb. This is what Dayley (1990) calls the 'reordering passive'.

In K'iche' there are two kinds of passives (Mondloch 1981, Larsen 1988. López 1997 among others); the first passive is the syntactic passive and the second one is called the completive passive (or lexical passive). In this study I will use 'passive' to refer to the syntactic passive. The syntactic passive is marked on root transitive verbs by lengthening of the root vowel, as in (59b).

Active verb

(59) a. x-ø-u-l**o**q' ri wuuj ri ali.
COM-B3S-A3S-buy DET book DET girl
'The girl bought the book.'

Passive Agent oblique phrase

b. x-ø-l**oo**q' ri wuuj r-umal ri ali
COM-ø-buy.PASS DET book A3S-RN DET girl
'The book was bought by the girl.'

On derived transitive verbs, the passive is marked by the suffix *-x*, as in (60b). This suffix takes the place of the suffix *-j* which occurs in the active form of all derived transitives.

Derived active transitive verb

(60) a. x-ø-u-q'aalu-j ri nee' ri ixoq
COM-B3S-A3S-hug-ACT DET baby DET woman
'The woman hugged the baby.'

	Passive form		Agent oblique phrase
b.	ri nee'	x-ø-q'aalu-**x**	r-umal ri ixoq
	DET baby	COM-B3S-hug-PASS	A3S-RN DET woman

'The baby was hugged by the woman.'

In the passive voice the patient is marked on the verb by a Set B marker, and the agent, if it is mentioned, is introduced by the relational noun *-umaal* preceded by a Set A marker, as in (59b) and (59b). Mondloch (1981:138-139) indicates that in this case the oblique agent must be third person.

The lexical passive is marked by the suffix *-Vtaj* on root transitive verbs, as in (61), and by *-taj* on derived transitive verbs, as in (62).[15]

(61) ¿qas x-ø-u-k'ulmaj ri qa-tinamiit?
int COM-B3S-A3S-happen DET A1P-town
'What happened to our town?'
x-ø-chap-**ataj** ki-kamsa-x-iik k-umal r-e'jeersita
COM-B3S-start-PASS A3P-kill-PASS-VN A3P-RN DET-army
'They started being killed by the army.' {R007I001:143}

(62) i x-ø-u-min r-u'-joloom ri' r-tz'i'
and COM-B3S-A3P-introduce DET-A3S-head DEM DET-dog

[15] Larsen (1988) proposes that the lexical passive indicates that the patient changes its state as a result of the event; England (2001) says that the lexical passive indicates that an event is completely done; and Can Pixabaj (2007) proposes that this type of passive only occurs with achievement situation types, and indicates the final state of the patient.

i na x-ø-tzoqopi-**taj** ta ch-u'loq .
and NEG COM-B3S-release-PASSIRR PREP-DIR
'And the dog introduced his head, and it was not released anymore.'
{R030I001:138}

2.9.2. Antipassive voice

The antipassive verb has only one argument, marked by a Set B marker. This argument corresponds to the semantic agent, and the former object of the verb is demoted to an oblique. The antipassive voice in K'iche' and in other Mayan languages has been addressed not only descriptively but also theoretically in past work (Mondloch 1978, 1981; Larsen 1988, Can Pixabaj and England 2011, Trechsel 1981, Davies and Sam-Colop 1990, Aissen 2012, Stiebels 2006, López 1997, among others). In this study I maintain that there are three types of antipassives, mainly following López (1997): the absolutive antipassive, the incorporative antipassive, and the focus antipassive.

In K'iche' the absolutive antipassive is derived by *-Vn* for root transitive verbs, as in (63a-b), and *-n* for derived transitive verbs, as in (63c). In this type of antipassive the agent is not necessarily extracted and the patient is not usually realized (Davies and Sam-Colop 1990:525). This is the type of antipassive used with verbal nouns, as I will show in Chapter 3.

(63) a. le achi tajin ka-ø-k'ut-**un** ulo je wa'
DET man PRG INC-B3S-point-AP DIR here
'The man is pointing here.'

b. are ri achi, ri ka-ø-mes-**on** ronojel q'iij waraal
FOC DET man REL INC-B3S-sweep-AP every day here
'The man who sweeps here every day.'

c. k-ee-q'ojoma-**n** le alab'oom
INC-B3P-play-AP DET boys
'The boys play (a musical instrument [marimba]).'
{Davies and Sam-Colop 1990:525}

The incorporative antipassive occurs when the direct object is unspecified or generic. This means that the direct object occurs without any determiner and it occurs after the verb. This object is not marked by any person on the verb, and it does not require a relational noun to introduce it either. The incorporative antipassive is marked by the morphemes *-Vw* for root transitive verbs and *-n* for derived transitive verbs.

(64) la at k'u x-at-k'ayi-n **xajab'** ojeer?
INT PRO2S PART COM-B2A-sell-AP shoes long.ago
'Was it you the one who sold shoes in the past.'

The third type of antipassive is the focus antipassive. In this case the agent is necessarily extracted. The patient, if one is mentioned, is introduced by the relational noun *-eech* preceded by a Set A marker unless it is unspecified or generic. The morphemes that derive this type of antipassive are the same as for the incorporative antipassive: *-Vw* for root transitives and *-n* for derived transitives.

(65) **are le ak'aal** x-ø-loq'o-w lo k-eech le ak'
FOC DET child COM-B3S-buy-AP DIR A3P-RN DET chicken
'It was the child who bought the chickens.'

In addition, K'iche' has an agent focus (AF) voice that in previous studies has been considered a type of antipassive (Mondloch 1981, Larsen 1988, and Davies and Sam-Colop 1990, López 1997), although even these previous authors recognize that it is somehow different from the antipassive voice. Recently, Velleman (2014) suggests that it should be treated differently from the antipassive for its properties that are different from the antipassive voice. The agent focus voice is indicated by *–ow* on root transitive verbs (66a) and *–n* on derived transitives (66b), just like the incorporative and focus antipassive. Although the morphology of the agent focus voice is the same as the antipassive voice, the agent focus voice is not syntactically intransitive, but transitive. The agent focus voice licenses two arguments, unlike the antipassive: the argument marked on the verb is the patient; and the agent is in focus position, but is not marked on the verb, and is not oblique either.

The agent focus voice is used when the agent is extracted, focused, questioned or relativized (Davies and Sam-Colop 1990). The following examples (66-68) show the agent focus. In (66) the agent is extracted and it appears in sentence-initial position. Because it is focused, the noun is preceded by the particle *are* since it is definite.

(66) a. **are ri ali** x-oj-il-**ow** kanoq
FOC DET girl COM-B1P-see-AF DIR
'It was the girl who saw us.'

b. **are** ri ixoq x-in-sik'i-**n** **uloq**
FOC DET woman COM-B3S-call-AF DIR
'It was the woman who called me.'

In (67) the agent is questioned and the agent focus voice is used; in (68) the agent is relativized and therefore the agent focus voice is required.

(67) **jachin** x-at-q'alu-n-ik?
who COM-B2S-hug-AF-SS
'Who hugged you?

(68) ri achi **ri** x-ø-mes-**ow** le ja
DET man REL COM-B3S-sweep-AF DET house
'The man who sweept the house.'

The data that I have shows that either the antipassive or the agent focus voice is used in the same context. Thus, (67) could be rephrased with an antipassive verb by adding the patient in an oblique phrase (*jachin xq'alun* ***aweech***? rather than *jachin x**at**q'alunik*?) and in (68) could also use the agent focus voice (*ri achi ri xmeson* ***reech*** *le ja* rather than *ri achi ri xmesow ri ja*).

Table 2.7: Passive and antipassive derivations

	Lexical-Pass	**Syntactic-Pass**	**Focus-AP**	**Absolutive-AP**	**Incorporative-AP**
Root transitive verbs	-(VR)taj	vowel lengthening	-ow/-uw	-on/-un	-ow/-uw
Derived transitive verbs	-taj	-x	-n	-n	-n

2.10. Syntactic processes

To test the syntactic independence or dependence of complement and purpose clauses from the matrix predicate, I evaluate the use of some clausal elements within them such as negation, extraction, and secondary predicates. In this section I present the behaviors of these elements in a simple clause.

2.10.1. Focus and topic

It has been suggested that topic and focus are associated with two syntactic positions before the verb (Norman 1977, Aissen 1992, England 1997, Can Pixabaj and England 2010, among others).[16]Topic comes before focus; if there are two elements before the verb, this allows us to easily identify the first as the topic, as in the following example.

[16] Recently, it has also been recognized that in K'iche' focus can be in situ (Velleman 2014). However, what is relevant for this study are the dislocated topic and preverbal focus.

	TOP		FOC					
(69)	**q-onojeel**	**wa'**	**pa**	**q'ab'**	**la**	oj	k'o **wi**	nu-dyoos
	A1P-everybody	DEM	PREP	hands	2FS	B1P	EXS FOC	A1S-God
	'For sure we all are in your hands, God.'							{R146I006:039}

If there is only one element before the verb, it can be identified as a topic if it is followed by a pause. Without a pause, it will be a focused element (Can Pixabaj and England 2010). In (70–71) the NP in preverbal position is followed by a pause, and so can by identified as a topic.

Topic

(70)	la	b'a	chaniim	k-ø-q-il-o	**la'l-tom-aab'**	**le**	**alab'oom**,	
	PART	PART	now	INC-B3S-A1P-see-SS	DET.girl-PL-PL	DET	boys	
	ya	ka-ø-ki-k'aq		k-iib'	pa	k'ax-a	taq	jastaq
	ya	INC-B3S-A3P-though		A3P-REF	PREP	bad-EV	PL	things
	'As for now we see that girls and boys do bad things.'							
	{R146I006:039}							

(71)	i	**sin**	**Julya'n**,	x-ø-kaanaj	kan	pa	le kaye
	and	AFFE	Julián	COM-B3S-stay	DIR	PREP	DET street
	'…and don Julián stayed in the street.'						
	{Can Pixabaj and England, 2011:18}						

In (72) the element that precedes the verb is in focus position. It is not followed by a pause, and is new information.

(72) **jun laj ne'** ø-k'o ch-u-paam
a small baby B3S-EXS PREP-A3S-RN
'…a baby was inside…' {Can Pixabaj and England, 2011:19}

The example in (73) also has a focused element; however, this NP is preceded by the focus particle *are* (indicating contrastive focus). The use of the particle *are* is obligatory when the focused NP is definite.

(73) **are r-in-taat** x-i'l-ow-ik,
FOC DET-A1S-father COM-B3P.see-AP-SS
in, na x-ø-inw-il taj
PRO1S NEG COM-B3S-A1S-see IRR
'…it was my parents who saw it, I didn't see it.'
{Can Pixabaj and England, 2011:18}

When the focused argument is a locative, a comitative, an instrument, or any adjunct except the indirect object, the particle *wi* appears after the predicate, as in (74).[17] However, when this argument is a direct argument the particle *wi* does not occur as in (72) or (73).

[17] The example in (74) does not seem to be a complement clause without complementizer. I have provided what I think is its literal translation; however, it could be that the speaker could have omitted the complementizer *chi*. However, what is relevant in this example is the fronting of the adverb *chla'* 'there' and the occurrence of the particle *wi*.

(74) x-ø-r-il r-b'alam **chla'** x-ø-ok **wi**
COM-B3S-A3S-see DET-tiger there COM-B3S-enter PART
i lare' tambyen x-ø-u-'on perseguir
CNJ PRO3S also COM-B3S-A3S-make follow
'The tiger saw that it went there, and he also chased it.'
Lit: 'The tiger saw it, he went there, and he, the tiger chased it.'
{R052I001:340}

2.10.2. Negation and interrogation

Negation is indicated by the particle *ma/man/na*[18] and the irrealis particle *taj/ta*. The negated element is found between these two particles. The irrealis particle has the form *taj* only if it is the last element of the clause. It is otherwise shortened to *ta*. To negate a predicate (or sentence) one adds the particles *na* and *ta(j)* surrounding the verb or non-verbal predicate.

(75) **na** x-ø-ki-kamsa-j **taj** x-ø-ki-k'am b'i ch-o-ja
NEG COM-B3S-A3P-kill-ACT IRR COM-B3S-A3P-receive DIR PREP-RN-house
'They did not kill it, they took it home.' {R052I001:067}

(76) **na** ki-ø-ki-tyoxi-j **ta** chi kan ki-wa
NEG INC-B3S-A3P-thank-ACT IRR PREP DIR A3P-food
'They did not even give thanks for their food.' {R069I001:134}

[18] These forms are due to dialect variation (Par Sapón and Can Pixabaj 2000:195). The form that is used in the communities where the data of this dissertation come from is mostly *na*, or sometimes *ma* in Nahualá and Ixtahuacán.

(77) ø k'o ne muul wa' xaq k-e-yakataj q'anoq
B3S EXS PART time DEMPART INC-B3P-get.up DIR
ma ka-ø-k-a'n **ta** saqrik,
NEG INC-B3S-A3P-make IRR good.morning
'Maybe there are times that they just wake up,
and they don't say 'good morning'.' {R069I001:135}

For NP or constituent negation the same particles are used. An NP cannot be negated in its original position; it has to be moved to focus position, and then negation is applied. In (78a) I present the VOS sentence and in (78b) I show the negation of its non-specific NP object, which has been moved to focus position.

(78) a. k-ø-u-tzuku-j ixiim ri ak'aal
INC-B3S-A3S-seek-ACT maize DET child
'The child looks (is looking) for maize.

b. **na** ixiim **ta** k-ø-u-tzuku-j ri ak'aal
NEG maize IRR INC-B3S-A3S-seek-ACT DET child
'It is not maize that the child is looking for.'

When the NP is definite, what is surrounded by the negative particles is the focus particle *are,* as in (79), and not the NP itself.

(79) **na** are **ta** le ixiim k-ø-u-tzuku-j ri ak'aal
NEG FOC IRR DET maize INC-B3S-A3S-seek-ACT DET child
'It is not the maize that the child is looking for.'

When the original transitive subject goes to focus position, the verb changes to antipassive, and then negation is applied, as in (80).

(80) a. **na** ak'alaab' **ta** k-e-tzuku-n r-eech ri ixiim
NEG children IRR INC-B3P-seek-AP A3S-RN DET maize
'It is not children who are looking for the maize.'

b. **na** are **ta** le ak'alaab' k-e-tzuku-n r-eech ri ixiim
NEG FOC IRR DET children INC-B3P-seek-AP A3S-RN DET maize
'It is not the children who are looking for the maize.'

Interrogation basically involves the same process as for negation. The interrogative particles are *la* and *k'u(t)* for yes-no question. The questioned element appears in between the two particles, as in (81).

(81) **la** x-at-wa' **k'ut**?
INT COM-B2S-eat PART
'Did you eat?'

As shown in (82), a noun that is being questioned goes to sentence-initial position. If the questioned noun is the original agent of a transitive verb, the verb becomes antipassive, as in (82a). Notice that the noun in (82a) is non-specific. In (82b) the noun is definite; therefore the particle *are* is used, and is the element that goes between the two interrogative particles rather than the noun itself.

(82) a. **la** ak'alaab' **k'u** k-e-tzuku-n r-eech ri ixiim?
INT children PART INC-B3P-seek-AP A3S-RN DET maize
'Is it children who are looking for maize?'

b. **la** are **k'u** le ak'alaab' k-e-tzuku-n r-eech ri ixiim?
INT FOC PART DET Children INC-B3P-seek-AP A3S-RN DET maize
'Is it the children looking for maize?'

In (83) there is an example where the questioned element is a locative. *Wi* occurs in this example for the movement of that locative which is consistent with the movment of prepositional phrases.

(83) **la** waraal **k'u** x-ix-wa' wi?
INT here PART COM-B2P-eat PART
'Was it here where you ate?'

2.11. Subordinate clauses

In this section I summarize some important characteristics of subordinate clauses in K'iche', since I will contrast some of them to complement and purpose clauses in later chapters.

2.11.1. Relative clauses (RC)

López (1997) says that in K'iche' a RC is introduced by a relative pronoun, whereas Larsen (1988) indicates that a relative clause can optionally be introduced by a definite article.[19] The arguments that can be relativized are

[19] Velleman (2014:81) also talks about relative clauses that do not have either a definite article (which she analyzes as a complementizer) or a relative pronoun. I will not go into detail in this regard, although I will say that the "optionality" of the complementizer or relativizer is semantically motivated. Thus, it seems that there is a slight difference in meaning between when the relativizer is present and when it is absent.

subjects (except for transitive subjects; for as we have already seen, the movement or focus of an ergative argument requires the use of the antipassive), objects, indirect objects, instruments, locatives, and benefactives.

(84) x-ø-mayamob' le achi [**le** x-ø-tzaaq pa xaq'o'l]
COM-B3S-collapse DET man REL COM-B3S-fall.down PREP mud
'The man who fell down in the mud, collapsed.' {López 1997:415}

The type of relative clause that López (1997) describes is a bound relative clause which modifies a noun head. However, it has been shown that K'iche' also has free (or headless) relative clauses (Henderson 2012, Velleman 2014). In (85) there is no noun head that the relative clause is modifying, but notice that there is a relativizer.

(85) x-ø-in-tij [**le** x-ø-a-ya' kanoq]
COM-B3S-A1S-eat DET COM-B3S-A2S-give DIR
'I ate what you left.'

In this study I will not go into the details of relative clauses, but I would like to highlight the following facts: first, relative clauses are post-nominal; second, a relative clause can be introduced by an overt relativizer or not; and third, a relative clause can be a free relative clause, which means that there may not be an overt noun head which it modifies. In the discussion of complement clauses we will see that even though complement clauses sometimes look like relative clauses, we can distinguish them because they have different properties.

2.11.2. Adverbial clauses

Various types of adverbial clauses have been identified in K'iche': purpose, temporal, causal/reason, conditional, and adverbial clauses (Larsen 1988, and López 1997). Purpose clauses (finite and non-finite) will be discussed in detail in Chapter 6. Aside from purpose clauses, adverbial clauses are finite. The examples below illustrate each type of clause: (86) is a temporal clause, (87) is a reason clause, and (88) is a conditional clause. López says that each type has a subordinator (*are taq* 'when' for time, *-umaal* 'because' for reason, and *we* 'if' for conditional).[20]

(86) x-oj-ki'kot-ik [**are taq** x-at-ul-ik]
COM-B1P-be.happy when COM-B2S-come-SS
'We got happy when you got here'

(87) Na x-ø-war taj [**rumal** sib'alaj yowaab']
NEG COM-B3S-sleep IRR because TNS sick
'He/she did not sleep because he/she is very sick'

(88) k-at-atin-oq [**we** at tz'iil]
INC-B2S-bathe-DEP if B2S dirty
'Bathe if you are dirty.'

But in fact, there are two general classes of adverbial clauses: the ones that are or can be introduced by a subordinator, as discussed above, and the ones that

[20] These subordinators can have other forms that are due to dialect differences or free variation: *are taq/taq* and *chi ri'/chri'/chi'* for temporal clauses, *reech/re* for purpose clauses, and *rumal/mal* for reason clauses.

can not. Manner clauses, as seen in (89), belong to the latter class. Another difference between manner clauses and other adverbial clauses is that manner clauses can only occur before the main clause, while the others can occur either after or before the main clause.

(89) a. k-in-xik'ik'-**ik** x-in-q'aax-ik
INC-B1S-fly-SS COM-B1S-pass-SS
'I passed by flying.'

b. k-in-b'in-**ik** x-in-'ee-k
INC-B1S-walk-SS COM-B1S-go-SS
'I left walking.'

Although manner adverbial clauses are different from other adverbial clauses, they will not be relevant for this study and I will not discuss them further.

In (90) I present a list of subordinators that have come up in this chapter and will come up in the following chapters:

(90) a. chi introduces finite complement clauses
b. reech introduces finite purpose clauses
c. we introduces conditional clauses and yes/no question clauses
d. ri/le introduce relative clauses
e. taq/are taq, chi ri'/chri'/chi' introduces temporal clauses

In this chapter I have presented information about the K'iche' grammar that will be relevant for the discussion of the main topics of this study: the internal and external structure of complement and purpose clauses in K'iche'.

Chapter 3

Finite and Non-Finite Complements: Basic Properties

3.1. Introduction

In this study, I will assume that a complement clause is "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate" (Noonan 2007:52). The functions that this notional sentence can have include subject of a transitive or intransitive predicate, object of a transitive verb, or indirect object of a ditransitive verb. In (1) the object of the predicate 'remembered' is [that Nell left] which corresponds to this notional sentence. It fills a direct object position in English.

(1) Zeke remembered [that Nell left]. {Noonan 2007:52}

This chapter presents a structural analysis of complementation in K'iche'. The proposal is that there are three structural types:

a. Finite with complementizer
b. Finite without complementizer
b. Non-finite

In (2) there is an example of a finite complement clause with a complementizer, in (3) there is an example of a finite complement without a complementizer, and in (4) there is an example of a non-finite complement.

(2) x-ø-q-il-o [**chi** na k-ø-u-k'am ta rajil
COM-B3S-A1P-see-SS COMP NEG INC-B3S-A3S-receive IRR money
le asosyasyon]
DET association
'We realized that the association does not need money.'
{Modified from R146I002:104}

(3) ka-ø-w-aaj [k-ø-in-b'iij]
INC-B3S-A1S-want INC-B3S-A1S-tell
'I want to tell it.'

(4) b'ay xaq si x-ø-in-tatab'e-j na in
then PART AFI COM-B3S-A1S-listen-ACT PART PRO1S
taq x-ø-u-maj [u-b'i-x-ik] la' le jwes...
when COM-B3S-A3S-start A3S-say-PASS-VN DEM DET judge
'Then I had to listen when the judge started to tell it.' {R149I007:143}

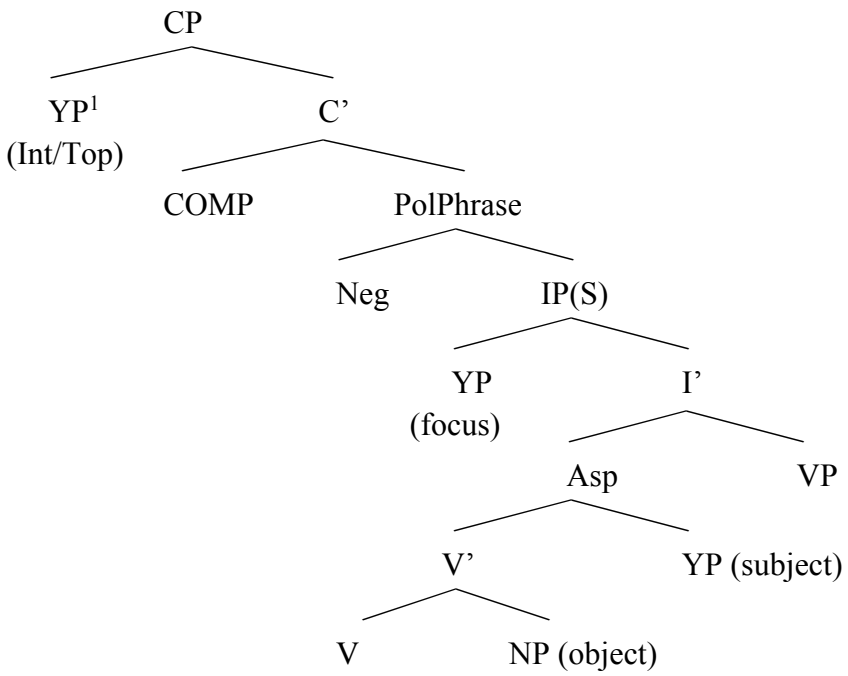
The three types differ in various ways. One set of differences has to do with their internal structure: i) presence or absence of TAM markers, ii) type of agreement marking, and iii) possibility of including negation, topic and focus. Another set of differences has to do with the category of the complement — whether it is more like a sentence or more like a noun phrase. A third set of differences, related to TAM and referentiality, has to do with semantic dependencies between the two clauses.

In this chapter I focus mainly on the internal structure of these three types of complement. In Chapter 4 the focus will be on the category of the complement, and in Chapter 5 the focus will be on semantic dependencies and the way they influence the choice of complement type.

This chapter is organized as follows: In §2 I present finite clauses with complementizers, which include declarative and interrogative clauses. In §3 I discuss finite clauses without complementizers. In §4 I discuss the third type of complement: non-finite clauses. This discussion will cover the different forms of the verbal noun, such as intransitive, antipassive, and passive, and also the reanalysis of the passive verbal noun as transitive. In §5 I discuss experiencer controllers which occur with non-verbal matrix predicates (Evaluative Adjectives).

Before I discuss the different types of complement, I will briefly repeat a few facts about the structure of a finite declarative independent clause in K'iche' that will be relevant for the analysis of complement clauses. As we saw in Chapter 2, a declarative finite independent clause in K'iche' can include the following elements: polarity, topic, and focus, as shown in the structure in Figure 3.1.

Figure 3.1. Structure of a declarative clause (Aissen 1992)



I assume that interrogative phrases (Int) and topics (Top) occur in the specifier of CP and that focus occurs in the specifier of IP, following Aissen (1992).

3.2. Finite clauses with complementizers

Finite clauses with complementizers occur in two subtypes: declarative and interrogative.

[1] YP = maximal projection of any type

Int/Top = interrogative and topic

Comp = complementizer

PolPh = polarity phrase

IP = intonational phrase

3.2.1. Declarative Finite Clauses

Declarative finite complement clauses in K'iche' are complements that have the syntactic form of an independent clause (S-like complements in Noonan's classification 2007:59). Declarative finite complements in K'iche' are introduced by the complementizer *chi*. Therefore I will assume that they have the structure of CPs as shown earlier. Declarative CP-complements follow the matrix predicate. (More specifically, we will see later that they always occur in sentence-final position.) This type of complement can function as object of a transitive verb. These clauses are treated as third singular, so they always are marked by set B singular.

(5) x-ø-q-il-o [chi k-ø-u-k'am rajil
COM-B3S-A1P-see-SS COMP INC-B3S-A3S-receive money
le asosyasyon]
DET association
'We realized that the association needs money' {R146I002:104}

Since declarative finite clauses with complementizers are CPs, they should have the same internal structure as any other finite declarative clause. This structure includes the possibilities of secondary predication, focus, polarity, and topic. Below I show examples with these elements. Example (6) has secondary predication, (7) has internal focus, (8) has internal negation, and (9) has internal topic and focus.

2P°
(6) in ø-w-eta'-aam [chi ø **jup-ul-ik**
PRO1S B3S-A1S-know-PP COMP B3S face.down-PRED-SC
1P°

x-ø-qaj-ik]

COM-B3S-go.down-SC

'I do know that s/he was born face down.'

FOC

(7) ...k-ø-in-b'ii-j [chi **are wa'** sin x-ø-i-'an

INC-B3S-A1S-say-ACT COMP FOC DEM AFFE COM-B3S-A1S-make

kan in]

DIR PRO1S

'I would say that this is what I have done.' {R153I003:089}

Negation

(8) ka-ø-q-il-o [chi **na** k-oj-u-k'am **taj**]

INC-B3S-A1P-see-SS COMP NEG INC-B1P-A3S-receive IRR

'We realize that s/he would not receive us.'

TOP

(9) ri al Ixchel, k-ø-u-chomaa-j [chi **ri u-naan**,

DET CL Ixchel INC-B3S-A3S-think-ACT COMP DET A3S-mother

FOC

jun ak' x-ø-u-loq' ulo-q]

a chicken COM-B3S-A3S-buy DIR:toward-SS

'Ixchel thinks that as for her mother, it was a chicken she bought.'

{Can Pixabaj and England 2010:14}

We saw that declarative CP-complements can be the object of a transitive verb as in examples from (5) to (9), but they can also be the subject of a nonverbal predicate as in (10-11).

(10) øi **tziij** [chi x-ø-anima-j b'i iwiir]i
B3S true COMP COM-B3S-run.away-ACT DIR yesterday
'It is true that s/he run away yesterday.'

(11) øi **q'alaaj** [chi na k-ø-aw-aj taj [k-ø-a-b'ii-j]]i
B3S seem COMP NEG INC-B3S-A2S-want IRR INC-B3S-A2S-tell- ACT
'It seems/clear that you don't want to tell it.'

3.2.2. Interrogative CP's

This type of complement has two types. One type is introduced by the particle *we*. In this construction I analyze *we*[2] as a polar interrogative complementizer.

(12) na x-ø-in-ta taj [**we** k-ix-ki-tzuq-u]
NEG COM-B3S-A1S-hear IRR COMP INC-B2P-A3P-feed-SS
'I did not hear/ask whether they will feed you or not.'

The other type corresponds to an information question. It starts with an interrogative phrase. These are not complementizers, but I assume that they moved up to the specifier of CP as shown in Figure 3.1, and that the complementizer is not pronounced.

[2] *We* is also used to introduced conditional clauses, so it has been glossed the 'conditional' particle.

(13) a. x-ø-u-b'i-j ch-w-e **[jawi** ø k'o-w kanoq**]**
INC-B3S-A3S-say-ACT PREP-A1S-RN where B3S EXS-FOC DIR
'S/he told me where it was.'

b. x-ø-u-ta **[jampa'** k-oj-'ee-k]
COM-B3S-A3S-ask when INC-B1P-go-SS
'S/he asked when we will go'

c. x-ø-u-ta **[jachin** ka-ø-'ee-k]
INC-B3S-A3S-ask who INC-B3S-go-SS
'S/he asked who is going to go.'

Interrogative CPs are CP-complements so they should have space for negation, focus and the other clausal elements. In (14a) there is a focused element within the complement clause before the predicate. The complement clause can also include negation, as (14b) shows.

(14) a. na x-ø-in-ta taj
NEG COM-B3S-A1S-hear IRR
[we **are ri ak'aal** k-ix-tzuq-uw-ik]
CND FOC DET child INC-B2P-feed-AF-SS
'I did not hear whether it is the child who is going to feed you'

b. na x-ø-in-ta taj [we **na** k-ix-tzuuq **taj**]
NEG COM-B3S-A1S-hear IRR CND NEG INC-B2P-feed.PASS IRR
'I did not know if you would not be fed.'

And it can include a secondary predicate, as in the example below:

2P°

(15) x-ø-r-il-o [jawi tak'-al-ik

COM-B3S-A3S-see-SS where stand.up-PRED-SS

1P°

x-in-qaaj wi]

COM-B1S-go.down PART

'S/he saw where I fell standing up.' {R052I001:507}

All the examples above show interrogative complements functioning as objects of transitive verbs. Interrogative CPs can also function as subject of non-verbal predicates:

(16) Na ø q'alaj taj [**we** ka-ø-'ee-k]

NEG B3S clear IRR COMP INC-B3S-go-SS

'It is not clear whether he is going.'

In conclusion, declarative and interrogative CP's have the same internal elements, except that an interrogative CP begins with an interrogative element, either the interrogative complementizer or an interrogative phrase.

3.3. Finite Clauses without complementizer

Finite complements without complementizers have the same form as finite complements with complementizers, except that there is no complementizer to introduce this complement. The translation into English has a non-finite complement, but it is important to see that in K'iche' the complement is finite. That is, the complement verb carries TAM morphology.

(17) a. x-ø-in-q'i'-o [x-in-atin pa joron]
COM-B3S-A1S-endure-SS COM-B1S-take.shower PREP cold.water
'I endured taking a shower in cold water.'

b. ka-ø-w-aaj [k-ø-in-b'ii-j]
INC-B3S-A1S-want INC-B3S-A1S-tell-ACT
'I want to tell it.'

Each of the components in (17a, b) can stand as an independent sentence: (17a) could correspond to a sequence of two sentences: "I endured it; I took a shower in cold water"; and (17b) could correspond to "I wanted it; I will tell it". We might therefore think that the connection between the two clauses is paratactic, but there are reasons why this analysis is not correct.

First, according to Noonan (2007:88) a crucial semantic property of paratactic construction is that each clause expresses an assertion. That is, "paratactic complements have interpretations as realized states or events" (Noonan 2007:117). The sentence in (17a) could be analyzed this way: "I endured it; I took a shower in cold water." But this does not hold for (17b), where the second clause is in the scope of the first clause and does not express an independent assertion. There is no certainty about the realization of the verb in the complement. We can see this further if we negate the matrix verb as in (18), where the sentence does not assert that 'my husband worked'.

(18) **na** x-ø-in-taqchi'-j **ta** le w-achajiil [ka-ø-chakun-ik]
NEG COM-B3S-A1S-force IRR DET A1S-husband INC-B3S-work-SS
'I did not force my husband to work.'
(Did he work? maybe, maybe not)

Second, according to Noonan (2007:88), in a paratactic construction "the notional subject of each verb following the first is coreferential with either the subject or object of the preceding verb". This is true in some cases like (17a) and (17b) where there is coreference between the subject of the matrix and the subject of the complement; it is also true in (19) where we have coreference between the object of the matrix verb and the subject of the complement. But it is not true in all cases. In examples like (20) and (21) there is no coreference between the subject of the matrix and the subject of the complement.

(19) x-**oj**-u-taqchi'ii-j [x-**oj**-'ee-k]
COM-B1P-A3S-force-ACT COM-B1P-go-SS
'S/he forced us to go'

(20) x-ø-**r**-aaj [ka-**at**-'ee-k]
INC-B3S-A3S-want INC-B2S-go-SS
'S/he accepted that you go. '

(21) pero x-ø-**in**-koch'o [x-ø-**ki**-b'i-j tziij (ch-w-e)],
but COM-B3S-A1S-endure COM-B3S-A3P-tell-ACT word PREP-A1S-RN
na x-in-ch'a' ta ch-k-e
NEG COM-B1S-complain.about IRR PREP-A1P-RN
'But I endured that they told things to me, I did not complain about it.'
{R056I002:166}

Third, it is possible to move an interrogative from the second clause to the initial position of the first. In (22a) the locative is moved to the initial position and the particle *wi* is left after the verb in the complement where the locative was taken from. In (22b) what is extracted is the object of the complement. This would

not be possible if the two clauses were in a paratactic relation. In order for a phrase to move from one clause to another, the clause from which the phrase moves must be embedded in the clause to which it moves.

(22) a. **jawi** k-ø-aw-aaj [k-at-wa' ___ **wi**]
where INC-B3S-A2S-want INC-B2S-eat FOC
'Where do you want to eat?'

b. **Jas** k-ø-aw-aaj [k-ø-in-tij-o ___]?
what INC-B3S-A2S-want INC-B3S-A1S-eat-SS
'What do you want me to eat?'

For these reasons I believe the paratactic analysis is not correct. Therefore I propose that the second clause is embedded. The absence of a complementizer is an indication that these complements are not full CPs. I propose that they are IP (S). The structure in (5) leads to the expectation that those cases should lack spaces for certain elements such as topic, but should have space for focus and secondary predicates. In (23) I show that the complement can have a secondary predicate. In (24) and (25) there is focus in the complement.

Secondary predication 2P° 1P°
(23) x-ø-in-q'i'-o [tak'-al-ik x-in-pet-ik]
COM-B3S-A1S-endure-SS stand-PRED-SS COM-B1S-come-SS
'I endured coming standing up'

Focus
(24) x-ø-u-q'i'-o [**arele** **u-k'uleel**
COM-B3S-A3S-endure-SS FOC DET A3S-enemy

x-ø-ya'-ow u-wa]
COM-B3S-give-AP A3S-food
'S/he endured to be fed by his/her enemy'
(lit. S/he endured that it was his enemy who fed him/her)

Focus

(25) ri al Ixchel, x-ø-u-q'i'-o
DET CL Ixchel INC-B3S-A3S-endure
Focus
[**xa** **jun ak'** x-ø-sipa-x ch-e
PART one chicken COM-B3S-give-PASS PREP-RN
'Ixchel endured that it was only one chicken that she was given.'

In (26b) and (27b) I show that internal topic is ungrammatical.

(26) a. x-ø-u-q'i'-o [x-ø-kam-sa-x ri r-achalaal
COM-B3S-A3S-endure-SS COM-B3S-die-CAU-PASS DET A3S-brother
ch-och]
PREP-RN
'S/he endured that her brother was killed in her presence.'
TOP
b. *x-ø-u-q'i'-o [**ri** **r-achalaal** x-ø-kam-sa-x
COM-B3S-A3S-endure-SS DET A3S-brother COM-B3S-die-CAU-PASS
ch-och]
PREP-RN
Intended reading: 'S/he endured that her brother was killed in her presence.'

(27) a. x-ø-r-aaj [ka-ø-'e le u-naan]
COM-B3S-A3S-want INC-B3S-go DET A3S-mother
'S/he wanted her/his mother to go.'

TOP
b. *x-ø-r-aaj [**le** **u-naan** ka-ø-'ee-k]
COM-B3S-A3S-want DET A3S-mother INC-B3S-go-SS
Intended reading: 'S/he wanted her/his mother to go.'

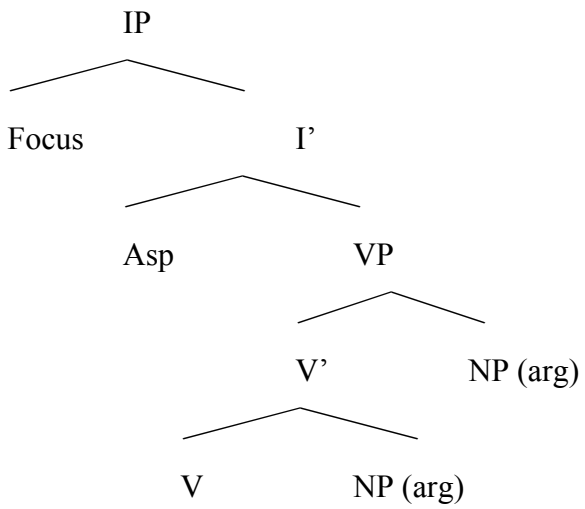
There are verbs that take a finite complement without complementizer which do not permit negation in the complement. This is consistent with the structure in (3.1) because negation is outside the IP.

(28) a. x-ø-in-xi'j w-iib' [x-in-ch'aaw-ik]
COM-B3S-A1S-be.afraid A1S-REF COM-B1S-talk-SS
'I was afraid to talk.'

b. *x-ø-in-xi'j w-iib' **[na** x-in-ch'aaw **taj**]
COM-B3S-A1S-be.afraid A1S-REF NEG COM-B1S-talk IRR
Intended reading: 'I was afraid to not talk.'

Figure 3.2 illustrates this type of complement that is headed by an IP.

Figure 3.2. S-complement structure



However, other verbs that select this type of complement do allow negation in the complement.

(29) a. ka-ø-**q**-oy’ee-j [**na** k-**ix**-pe **taj**]
INC-B3S-A1P-hope-ACT NEG INC-B2P-come IRR
‘We hope that you do not come.’

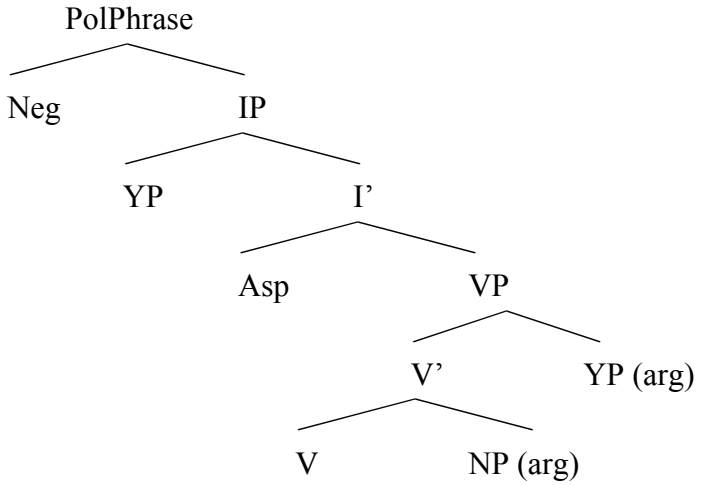
b. x-ø-in-q’i’-o [**na** x-in-atin **taj**]
COM-B3S-A1S-endure-SS NEG COM-B1S-take.shower IRR
‘I endure to not take a shower.’

c. In k-ø-in-b’ii-j **na** k-at-saach **taj**
PRO1S INC-B3S-A1S-tell-ACT NEG INC-B2S-get.lost IRR
‘I thought that you would not get lost.’

d. k-ø-w-aaj [**na** k-at-'e **taj**]
INC-B3S-A1S-want NEG INC-B2S-go IRR
'I would like/want that you not go.'

The earlier structure (3.1) shows that negation is between the CP and the IP nodes. This suggests that I have to assume that negation heads its own polarity phrase. These verbs select the polarity phrase, as Figure 3.3 illustrates.

Figure 3.3. Polarity Phrase



The complement taking predicates in K'iche' thus have three choices of complement: a CP, a Polarity Phrase, and an IP (S-complement). Verbs such as *aaj* 'want', *q'i'* 'endure', and *b'iij* 'say/tell' select polarity phrases when they include negation, but also an IP when they do not include negation. However, verbs such as *xi'j iib'* 'be afraid' and *rayiij* 'desire' only select IPs.

There is a connection between coreference and negation. The verbs that allow negation in the complement do not require coreference between the subject of the complement and the subject of the matrix as examples in (30) show.

(30) x-ø-**u**-q'i'-o [**na** x-**at**-atin **taj**]
COM-B3S-A3S-endure-SS NEG COM-B2S-take.shower IRR
'S/he endured that you did not take a shower.'

(31) In k-ø-in-b'ii-j [**na** k-at-saach **taj**]
PRO1S INC-B3S-A1S-tell-ACT NEG INC-B2S-get.lost IRR
'I thought you would not get lost.'

(32) k-ø-w-aaj [**na** k-at-'e **taj**]
INC-B3S-A1S-want NEG INC-B2S-go IRR
'I would like/want that you do not to go.'

However, verbs that do not allow negation in the complement do require coreference. (33a) is grammatical with coreference between the two subjects and with no negation in the complement. Negation in the complement is ungrammatical, as (33b) shows; a disjoint subject is also ungrammatical, as (33c) shows.

(33) a. k-ø-**in**-rayii-j [k-ø-**in**-qumu-j ju-qub' nu-joroon]
INC-B3S-A1S-wish-ACT INC-B3S-A1S-drink-ACT one-MSR A1S-water
'I wish to drink a bit of water.'

b. *k-ø-in-rayii-j [**na** k-ø-in-qumu-j **ta**
INC-B3S-A1S-wish-ACT NEG INC-B3S-A1S-drink-ACT IRR
ju-qub' nu-joroon]
one-MSR A1S-water
Intended reading: 'I wish to not drink a bit of water.'

c. *k-ø-**in**-rayii-j [k-ø-**a**-qumu-j ju-qub' a-joroon]
INC-B3S-A1S-wish-ACT INC-B3S-A2S-drink-ACT one-MSR A2S-water
Intended reading: 'I wish you to drink a bit of water.'

It seems that when a verb selects an IP, it requires inherent control in Stiebels' terms. According to Stiebels (2007) inherent control means that the higher predicate requires that the subject in the complement should be identical to some higher argument even if the complement is a finite clause.

In (34) the subject of the matrix is identical to the subject of the complement, first person singular. The second verb is a fully inflected verb, with a subject agreement marker. But that agreement marker cannot be changed: it must be identical to the one on the main verb.

(34) k-ø-**in**-rayii-j [k-ø-**in**-qumu-j
INC-B3S-A1S-wish-ACT INC-B3S-A1S-drink-ACT
ju-qub' nu-joroon]
one-MSR A1S-water
'I wish to drink a bit of water.'

Aaj 'want' also illustrates the connection between coreference and negation. When there is coreference, negation is usually not possible, but when there is no coreference, negation is possible.

(35) a. ka-ø-w-aaj [k-in-'e-k]
INC-B3S-A1S-want INC-B1S-go
'I want to go.'

b. *ka-ø-w-aaj [**na** k-in-'e **taj**]
INC-B3S-A1S-want NEG INC-B1S-go IRR
Intended reading: 'I want not to go.'

c. ka-ø-w-aaj [**na** k-at-'e **taj**]
INC-B3S-A1S-want NEG INC-B2S-go IRR
'I want you not to go.'

However, there are cases where *aaj* 'want' permits negation in the lower clause regardless of the coreference between the matrix subject and the complement subject. This is possible when there is polarity focus on the negation of the complement itself. This can happen in a sequence of two sentences where the complement is affirmative in the first sentence, but negative in the second sentence. In (36) the positive form of the complement is directly contrasted with the negative form.

(36) ka-ø-w-aaj [k-ø-in-b'iij] ka-ø-w-aaj [**na**
COM-B3S-A1S-want INC-B3S-A1S-tell COM-B3S-A1S-want NEG
k-ø-in-b'ij **taj**]
COM-B3S-A1S-tell IRR
'I am not sure/don't know whether I want to tell it or not.'
(Lit: 'I want to tell it, I want to not tell it.')

Focus on the negative complement is also found in sentences like (37) where the focus particle is associated with the negative complement. In order to have the negative form of the complement, *aaj* 'want' must select a polarity phrase.

(37) Are ka-ø-w-aaj [na k-in-'e taj]
FOC INC-B3S-A1S-want NEG INC-B1S-go IRR
'What I want is not to go.'

In conclusion, finite complements without complementizers can be divided into two subtypes: those that can take negation and those that cannot. We have seen that S-complements require coreference of subjects. It is important to note that they also require TAM matching between the matrix and the complement in most cases. This will be discussed in Chapter 4. These restrictions mean that the difference between CP and S-complements goes beyond the mere presence or absence of a complementizer.

3.4. Non-finite complements

3.4.1. Introduction

Non-finite complements have nominalized verb forms as their heads. Table 3.1 summarizes the suffixes that derived nominalized verbs.

Table 3.1. Forms of verbal nouns

Types	intransitive	antipassive	passive	transitive
suffixes	-iim, -eem, -aam -ooj -ik	-ik -eem	-ik	-ik

Example (38) shows the nominalization of a basic intransitive, (39) shows the nominalization of an antipassive, and (40) of a passive verb. Notice that

nominalized antipassive and passive verbs carry the usual voice changing morphology.

(38) ch-ø-qa-chap-a [**wa'-iim**]
IMP-B3S-A1P-start-DEP eat-VN
'Let's start eating.'

(39) x-ø-r-eta'ma-j [**kuna-n-ik**]
COM-B3S-A3S-know-ACT cure-AP-VN
'S/he learned to cure.'

(40) na k-oj-u-ya' ta [pa **kuna-x-ik**]
NEG INC-B1P-A3S-give IRR PREP cure-PASS-VN
'S/he does not allow us to be cured.'

Nominalized verbs lack the TAM marking that is found on finite verbs. Instead they carry nominalizing suffixes: *-iim* in (39) and *-ik* in (40) and (41). The forms in (38) to (40) lack agreement, but we will see examples below where this is not the case. The nominalized complements in (38) to (40) consist only of a single word, but the complement can be larger: it is a phrase. The subject of the complement is never syntactically realized, but other elements in the phrase can be realized. In (41) I show that the nominalized complement can have an instrument and in (42) I show that it can include a locative phrase.

Instrument

(41) x-ø-r-eta'ma-j [wa'-iim **r-uk'** **pak'**]
COM-B3S-A3S-learn-ACT eat-VN A3S-RN spoon
'S/he learned to eat with spoon.'

				Locative
(42)	x-ø-u-taqchi'-j	[pa	war-aam	**p-uleew**]
	COM-B3S-A3S-force-ACT	PREP	sleep-VN	PREP-floor
	'S/he forced him/her to sleep on the floor.'			

Nominalized complements can also include direct and indirect objects. This will be shown more clearly when I consider transitive nominalizations in section (3.4.5.).

As we saw already in (38–40), non-finite verbs show voice alternations: intransitive, antipassive and passive verbs can be the bases of non-finite complements. Intransitive nominalizations have an intransitive root or base. The different derivational affixes found on intransitive nominalizations, which can be: *-VVm*, *-ik*, or *-VVj*. Examples of intransitive non-finite complements are provided in (43-44).

(43)	xaq pe	che	x-ø-u-chap	**[birb'ot-eem**	pa	teew],
	PART PART	DAT	COM-B3S-A3S-start	tremble-VN	PREP	cold
	ka-ø-cha'					
	INC-B3S-say					
	'S/he started to tremble of cold, it says.'					{R057I001:325}

(44)	ya	x-ø-u-chop	tz'uum,	
	already	COM-B3S-A3S-start	breast	
	ya	x-ø-u-chop	**wa'-iim**,	
	already	COM-B3S-A3S-start	eat-VN	
	'It starded to breast-feed and it started to eat.'			{R013I001:677}

Antipassive non-finite complements have antipassive derivation. The type of antipassive that can occur in a non-finite complement is the absolutive antipassive. This antipassive does not express its patient, as I explained in Chapter 2. Example (45) illustrates an antipassive non-finite complement.

(45) a. x-ø-r-eta'ma-j [**kuna-n-ik**]
COM-B3S-A3S-know-ACT cure-AP-VN
'S/he learned to cure.'

b. x-ø-u-chap [**k'ayi-n-ik**]
COM-B3S-A3S-start sell-AP-VN
'S/he started selling'

Passive non-finite complements have passive morphology: vowel lengthening for root transitive verbs and the suffix *-x* for derived transitive verbs.

(46) a. na x-oj-u-ya' ta [pa **q'alu-x-ik**]
NEG COM-B1P-A3S-give IRR PREP hug-PASS-VN
'S/he did not allow us to be hugged.'

b. x-ø-r-aj [**chaap-ik**]
COM-B3S-A3S-want catch.PASS-VN
'S/he allowed him/herself to be caught.'
('it was not complicated to correct a child or to catch or trap an animal')

Nominalized complements occur in the same position as ordinary NPs and with the same case marking. Nominalized complements can function as subjects of intransitive predicates as in (47), and objects of transitive verbs as in (48). Non-

finite complements, like finite complements, are treated as third singular and cross-referenced by set B3 singular on the matrix predicates.

(47) ø k'ax [u-keem-ik le paas]
B3S bad A3S-weave.PASS-VN DET belt
'It is difficult to weave the belt.'

(48) x-ø-w-aj [kuna-x-ik]
COM-B3S-A1S-accept cure-PASS-VN
'I accepted being cured'

Nominalized complements can also be oblique arguments when they are selected by the semantics of the matrix verb and they must be introduced by a preposition, as the following examples show. All of the following are introduced by the preposition *pa*; later we will see examples introduced with the preposition *chi*.

(49) x-oj-u-ya' [**pa** kuna-x-ik].
COM-B1P-A3S-give PREP cure-PASS-VN
'He allowed us to be cured.'

(50) x-oj-u-taq [**pa** kayi-n-ik]
COM-B1P-A3S-send/order PREP sell-AP-VN
'He/she sent us to sell.'

(51) x-in-ok [**pa** wa'-iim]
COM-B1S-start PREP eat-VN
'I started eating.'

It seems that all matrix predicates that take non-finite complements also take simple NP complements and they show the same form as can be seen from (52) to (54).

(52) ø k'ax le nu-q'ab'
B3S hurt DET A3S-hand
'My hand hurts.'

(53) x-ø-w-aj le ali
COM-B3S-A1S-accept DET girl
'I wanted/loved the girl.'

(54) x-oj-u-taq pa le b'e
COM-B1P-A3S-send/order PREP DET street
'He/she sent us to the street.'

All of the examples from (39) to (51) show that the subject of a non-finite complement is not overtly realized. Nominalized verbs never carry agreement with their understood subjects, and no NP corresponding to the subject can be added to the complement. The interpretation of the complement' subject is determined by an argument of the matrix predicate. I will assume that the complement subject is controlled by this argument. When the matrix is a transitive verb and the complement is its direct object, the controller is the matrix subject.

(55) x-$ø_i$-r_j-eta'ma-j [$\__j$**kuna-n-ik**]
COM-B3S-A3S-know-ACT cure-AP-VN
'S/he learned to cure.'

When the matrix clause is a ditransitive verb, the complement functions as the oblique object and the controller is the direct object.

(56) a. x-oj$_i$-u$_j$-taq [pa _$_i$**war-aam**]
COM-B1P-A3S-send/order PREP sleep-VN
'He/she sent us to sleep.'

b. x-oj$_i$-u$_j$-ya' [pa _$_i$**q'alu-x-ik**]
COM-B1P-A3S-give PREP hug-PASS-VN
'S/he allowed us to be hugged.'

When the matrix is intransitive, it is the matrix subject which is the controller.

(57) x-in$_i$-ok [**pa** _$_i$wa'-iim]
COM-B1S-start PREP eat-VN
'I started eating.'

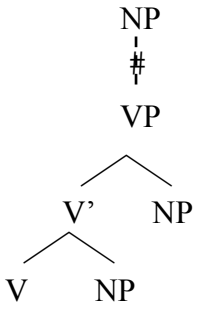
I will discuss how control works in structures like (47) with evaluative adjectives in Section 3.5.

3.4.2. Structure

In §3.4.5 we will see that a non-finite complement contains a predicate and its arguments (covert subject and overt direct object). We have seen that non-finite verbs show voice alternations (active, antipassive, passive). The non-finite complements share these properties with finite complements. However, unlike finite verbs, non-finite verbs lack TAM marking; and with regard to the position they occupy, they are like noun phrases.

Therefore I will assume that the structure of a non-finite complement contains a VP which holds the predicate and its arguments. Rather than being embedded in a sentential structure as a finite complement, it is a non-finite complement embedded in an NP. Below I will refer to them as nominalized complements. Below we see this structure.

Figure 3.4. Non-finite complement structure



If Figure 3.4 is the structure of a non-finite complement, this leads to several predictions. First, since negation only occurs outside of the VP in a sentential structure like the one shown in Figure 3.1, we do not expect to find negation in a nominalized complement. This prediction is upheld: negation is absolutely impossible, as (58) shows.

(58) a. *x-oj-u-ya' [pa **na** kuna-x-ik **taj**]
COM-B1P-A3S-give PREP NEG cure-PASS-VN IRR
Intended reading: 'He allowed us not to be cured.'

b. * ø k'ax [**na** wa'-iim **taj**]
B3S hard NEG eat-VN IRR
Intended reading: 'It is hard not to eat.'

c. *x-ø-w-aj [**na** kuna-x-ik **taj**]
COM-B3S-A1S-accept NEG cure-PASS-VN IRR
Intended reading: 'I accepted not to be cured.'

We assumed earlier that a focused phrase may move out of the VP into a position in the IP (Figure 3.1). We saw earlier that this movement is possible in finite complement (59).

(59) a. x-ø-r-eta'maa-j [chi **r-uk'** **paak'** k-ø-u-tij **wi**]
COM-B3S-A3S-learn-ACT COMP A3S-RN spoon eat-VN FOC
'S/he learned that with spoon s/he eats it.'

b. ø-w-eta'-aam [chi **p-uleew** x-ø-war **wi**]
COM-B3S-A3S-force-ACT COMP REP-floor COM-B3S-sleep FOC
'I know that on the floor he slept.'

However, focus fronting is not possible in a nominalized complement.

(60) a. *x-ø-r-eta'ma-j [**r-uk'** **paak'** wa'-iim (wi)]
COM-B3S-A3S-learn-ACT A3S-RN spoon eat-VN FOC
Intended reading: 'S/he learned to eat with spoon.'

b. *x-ø-u-taqchi'-j [**p-uleew** pa war-aam (**wi**)]
COM-B3S-A3S-force-ACT PREP-floor PREP sleep-VN FOC
Intended reading: 'S/he forced him/her to sleep on the floor.'

The ungrammaticality of both (58) and (60) is due to the fact that the nominalized complement is smaller than a CP, and therefore there is no room for elements such as negation and focus.

In the discussion of finite complements we saw that the CP has space for secondary predicates. But non-finite complements do not. In (61) the secondary predicate construction is composed of the positional (2P°) and the finite verb *ul* 'arrive' (1P°), and it is grammatical since it appears in a finite complement. However, (62b) is ungrammatical with the addition of a 2P°, but perfectly grammatical without it. This means that a secondary predicate is not possible in non-finite complements.

			2P°	1P°
(61)	x-ø-inw-il-o	[chi	tak'-al-ik	x-ø-ul-ik]
	COM-B3S-A1S-see-SS	COMP	stand-PRED-VN	COM-B3S-arrive-SS
	'I saw that he arrived standing up.'			

(62) a.	x-ø-in-chap	[ul-eem]	
	COM-B3S-A1S-begin	arrive-VN	
	'I began to come.'		
		2P°	1P°
b.	*x-ø-in-chap	[tak'-al-ik	ul-eem]
	COM-B3S-A1S-see-SS	stand-PRED-VN	arrive-VN
	Intended reading: 'I began to come standing up.'		

3.4.3. Transitive analysis

Up to now I have not discussed transitive non-finite clauses. The reason is that these involve some complications. In this section, I will discuss the analysis of transitive nominalizations.

Earlier we saw that passive verbs can be nominalized. In nominalized passives, the verb carries the usual passive morphology plus the nominalizing suffix *-ik*. We have already seen that passive has two allomorphs in K'iche' depending on whether the verb is a root transitive or a derived transitive. Root transitives form the passive by lengthening the vowel, while derived transitives form the passive by adding the suffix *-x*, as in (64b).

(63) a. x-oj$_i$-u$_j$-ya' [pa _$_i$**jiik**-ik]
COM-B1P-A3S-allow PREP massage.PASS-VN
'S/he allowed us to be massaged.'

b. x-oj$_i$-u$_j$-ya' [pa _$_i$kuna-**x**-ik]
COM-B1P-A3S-allow PREP cure-PASS-VN
'S/he allowed us to be cured.'

These are clear nominalizations of passives VP because the controlled subject corresponds to the patient. It is important to note that these nominalizations carry no agreement. However, passive nominalizations can occur with agreement in the form of Set A as in (64).

(64) x-ø-chaap [**u**$_i$-kuna-x-ik ri ak'aal$_i$]
COM-B3S-begin.PASS A3S-cure-PASS-VN DET child
'The child's curing began.'
Lit: 'The being cured of the child began.'

(If we assume that nominalizations like the one in (64) are truly passive, then they ought to be able to appear with overt agent phrases. The data here are somewhat complicated. Including an agent phrase as in (65a) results in ungrammaticality for reasons that I do not understand. But if the passive nominalization is introduced by a determiner as in (65b) then the sentence can have a marginal or questionable reading. This constitutes further evidence that this sort of non-finite complement is truly passive. Note that in (65b) the passive subject *le achi* 'the man' is not controlled by a matrix argument, therefore it must be expressed syntactically and must be cross-referenced by set A because this is the only possible agreement in NPs.)

(65) a. *x-ø-inw-il [u-kuna-x-iik le achi **r-umal le ixoq**]
COM-B3S-A1S-see A3S-cure-PASS-VN DET man A3S-RN DET woman
Intended reading: 'I saw the curing of the man by the woman.'

b. ?x-ø-inw-il [le u-kuna-x-iik le achi **r-umal le ixoq**]
COM-B3S-A1S-see DET A3S-cure-PASS-VN DET man A3S-RN DET woman
'I saw the curing of the man by the woman.'

But nominalized verbs with exactly the same passive morphology also occur with an active interpretation.

(66) x-ø-r-eta'maj [u-ch'aaj-iik]
COM-B3S-A3S-learn A3S-wash.PASS-VN
'S/he learned to wash it.'

(67) x-ø-u-chap [u-kuna-x-iik]
COM-B3S-A3S-begin A3S-cure-PASS-VN
'S/he began to cure him/her.'

Since the controlled argument in K'iche' in non-finite clauses is always the subject, this implies that the complement subject in (66) and (67) examples is the agent. That is, the complements are active. Further they appear to be transitive: because the patient argument is a direct argument of the verbal noun, it must be cross-referenced on the verbal noun. Again, cross-reference is by Set A prefixes.

(68) a. x-ø$_i$-u$_j$-chap [_$_j$u$_k$-kuna-x-iik le achi$_k$]$_i$
COM-B3S-A3S-begin A3S-cure-PASS-VN DET man
'S/he began to cure the man.'

b. x-ø$_i$-u$_j$-chap [_$_j$nu$_k$-kuna-x-iik]$_i$
COM-B3S-A3S-begin A1S-cure-PASS-VN
'S/he began to cure me.'

(69) x-ø-r$_i$-eta'ma-j [_$_i$**aw**$_j$-iil-iik]
COM-B3S-A3S-start A2S-see.PASS-VN
'S/he learned to take care of you.'

(70) xa je.la' x-ø-in-chop chaak,
PART PART COM-B3S-A1S-start work
x-ø-in$_i$-chop **[_$_i$k$_j$-iil-ik** ixoqiib'$_j$...]
COM-B3S-A1S-start A3P-see-VN women
'That's how I started to work, I started to attend women.'
{R013I001:0050}

As these examples show, there is no restriction regarding the person and number of a Set A marker that the verbal noun can bear.

This suggests that verbal nouns with passive morphology can be used in two ways: they can head nominalizations which are passive, but they can also head nominalizations which are active and transitive. I have discussed how control supports this proposal, but there is one more argument in its favor: the behavior of reflexives.

3.4.3.1. Reflexive

Reflexive clauses in K'iche' contain a reflexive noun, *-iib'*. The reflexive noun must have a pronominal possessor, which is cross-referenced on it by Set A. This possessor must have an antecedent in the same clause.

(71) xaq k-ø$_i$-u-tz'api-j [**r$_j$-iib'**]$_i$ le ak'aal$_j$
PART INC-B3S-A3S-close-ACT A3S-REF DET child

na utz ta la' n-cha in ch-e
NEG good IRR DEM B1S-say PRO1S PREP-RN
'The child just shut himself in. That is not good, I told him/her'
{R146I006:027}

In (71), the antecedent is the subject of the verb *le ak'aal* 'the child'. It antecedes the pronominal possessor, which as a result must be third person. Therefore the reflexive carries third-person singular Set A in agreement with *ak'aal*.

The reflexive noun phrase is the direct object of the verb. It is always third person singular. Thus, in finite clauses it is always cross-referenced on the verb by third person Set B. It seems that in K'iche' the reflexive is always the direct

object and its antecedent is always the subject. I will assume that for a reflexive to be possible, a clause must contain a subject and a direct object which are coreferential.

For that reason it is not possible to have a reflexive in a passive clause, as passive clauses do not contain a coreferential subject and object (72). This is also true in passive nominalizations, whether the subject is controlled (73) or not (74). In both cases, the passive nominalization lacks a coreferential subject and a direct object.

(72) *x-ø-ka'ye-**x** **r-iib'**
COM-B3S-see-PASS A3S-RN:REF
Intended reading: 'S/he saw her/himself.'

(73) *x-ø-u-ya' [pa atinsa-x-ik r-iib']
COM-B3S-A3S-begin PREP bathe-PASS-VN A3S-REF
Intended reading: 'S/he allowed him/herself to be bathed.'

(74) *x-ø-inw-il le u-kuna-x-ik r-iib' le achi
COM-B3S-A1S-see DET A3S-cure-PASS-VN A3S-REF DET man
Intended reading: 'I saw the man curing himself.'

However, the nominalized complements below do permit reflexives. These are the type that I propose are transitive. Although the morphology is passive, the controlled subject is the agent. If our conditions on reflexives require a coreferential subject and object, then these complements must be active transitives. The Set A on the verbal noun is third person singular. This is because it cross-references the reflexive noun which is always third person. The Set A marker on the reflexive carries the features of its antecedent.

(75) x-ø-inw-eta'ma-j [**r**-iil-ik **w**-iib']
COM-B3S-A1S-learn-ACT A3S-see.PASS-VN A1S-REF
'I learned to take care of myself.'

(76) la x-at-ok k'u [chi **r**-atinsa-x-ik **aw**-iib']?
INT COM-B2S-start PART PREP A3S-bathe-PASS-VN A2S-REF
'Did you started bathing yourself?

Earlier I claimed that nominalized complements contain a predicate and its arguments. Examples such as the ones discussed above, or (77) below, show that the object can be expressed, and (78) shows that the indirect object can also be expressed.

(77) x-ø-r_i-eta'ma-j [$\__i$**k**$_j$-iil-ik le ak'alaab'$_j$]
COM-B3S-A3S-learn A3P-see.PASS-VN DET children
'S/he learned to take care of the children.'

(78) x-ø-q_i-eta'ma-j [$\__i$**u**$_j$-ya'-ik tzi$_j$
COM-B3S-A1P-learn A3P-give.PASS-VNnixtamal
ch-k-e le ak'$_k$]
PREP-A3P-RN DET chicken
'We learned to give nixtamal to the chicken.'

3.4.3.2. Summary

In this section I have proposed that a passive verbal noun can sometimes be analyzed as transitive. In K'iche', in non-finite complements, the controllee is not overtly expressed and it always corresponds to the 'notional' subject; that is, to

the argument that would be the syntactic subject in the corresponding finite clause. Transitive nominalization displays structural control, where the controllee is the notional transitive subject which is not expressed. The nominalized transitive bears a Set A marker that cross-references the object or the patient.

Transitive nominalization allows the use of the reflexive pronoun. In Chapter 2 we saw that reflexive pronouns are possible with transitive verbs, but not with intransitive or passive verbs. Therefore this is an indication these nominalizations are actually transitive rather than passive regardless of their voice morphology.

3.4.4. Experiencer controllers (Evaluative predicates)

Earlier in this chapter I noted that there some non-verbal predicates that can take non-finite complements. However, not every non-verbal predicate belongs in this class; the ones that can take this type of complement clause are manner adjectives, as in (79), and evaluative adjectives, as in (80). Hereafter, I will refer to these matrix predicates as Evaluative Adjectives (EA).

(79) a. *no'jim*(*aal*) 'slow'
b. *aninaq*(*iil*) 'quick'

(80) a. *tzeb'al* 'funny'
b. *je'lik* 'beautiful'
d. *k'ax* 'difficult'
e. *k'ixib'al* 'shameful'
f. *utz* 'good'
g. *tzeel* 'bad'

Below I present examples of this type of non-finite complement clause. Example (81a) shows an intransitive complement, (81b) an antipassive complement, and (81c-d) a transitive complement.

(81) a. ø utz [wa'-iim]
B3S good eat-VN
'It is good to eat.'

b. ø k'ax [kuna-n-ik]
B3S hard cure-AP-VN
'It is difficult to cure.'

c. ø k'ax [u-keem-ik le paas]
B3S bad A3S-weave.PASS-VN DET belt
'It is difficult to weave the belt.'

d. ø k'ixib'al [u-keem-ik le paas]
B3S shameful A3S-weave.PASS-VN DET belt
'It is shameful to weave the belt.'

All the adjectives listed occur in this construction and all of them permit a second argument, an experiencer, to be expressed as an oblique.

(82) a. ø k'ax [u-keem-ik le paas] **aw-umaal**
B3S bad A3S-weave.PASS-VN DET belt A2S-RN
'It is hard for you to weave the belt.'

b. ø utz [u-keem-ik le paas] **ch-aw-e**
B3S good A3S-weave.PASS-VN DET belt PREP-A2S-RN
'It is good for you to weave the belt.'

Some of these adjectives, but not all, occur in a second construction in which the nominalized complement is an oblique. In these cases the experiencer is the matrix subject. Therefore there are two ways of expressing the experiencer. Contrast the examples in (83) and (84). In (83) the experiencer is the oblique argument, but in (84), the experiencer is the subject.

(83) ø no'jiim [u-keem-ik le paas] aw-umaal
B3S slow A3S-weave.PASS-VN DET belt A2S-RN
'You are slow at weaving the belt.'

(84) at no'jiim [**ch**-u-keem-ik le paas]
B2S slow PREP-A3S-weave.PASS-VN DET belt
'You are slow at weaving the belt.'

I will first discuss the construction where the experiencer is an oblique, and then I will discuss the construction where the experiencer becomes the subject of the non-verbal predicate and the nominalized complement becomes the oblique argument.

3.4.4.1. Experiencer as oblique

The experiencer can be realized as an oblique either in the form used for datives or in the form used for agents. Below I explain the context where each one occurs as well as their semantic role.

Dative experiencer

The dative experiencer is expressed by the preposition *chi* and the relational noun *–eech,* which together are usually reduced to *che*. The semantic role of a dative experiencer can be benefactive as in (85) or malefactive as in (86).

(85) ø utz [u-keem-ik le paas] **ch-aw-e**
B3S good A3S-weave.PASS-VN DET belt PREP-A2S-RN
'It is good for you to weave the belt.'

(86) ø k'ax [u-keem-ik le paas] **ch-aw-e**
B3S bad A3S-weave.PASS-VN DET belt PREP-A2S-RN
'It is hard for you to weave the belt.'

One piece of evidence that the experiencer is part of the matrix clause and not of the complement is that when the complement is fronted, the experiencer does not move, but stays in its clause-final position, as in (87a).

(87) a. [le u-keem-ik le paas] ø k'ax **ch-aw-e**
DET A3S-weave.PASS-VN DET belt B3S bad PREP-A2S-RN
'Weaving the belt is hard for you.' (because you have a lot to do)

b. *[le u-keem-ik le paas **ch-aw-e**] ø k'ax
DET A3S-weave.PASS-VN DET belt PREP-A2S-RN B3S bad
Intended reading: 'Weaving the belt is hard for you.' (because you have a lot to do)

(88) a. [le u-keem-ik le paas] ø utz (**ch-aw-e**)
DET A3S-weave.PASS-VN DET belt B3S good PREP-A2S-RN
'Weaving the belt is good for you.'

b. *[le u-keem-ik le paas **ch-aw-e**] ø utz
DET A3S-weave.PASS-VN DET belt PREP-A2S-RN B3S good
Intended reading: 'Weaving the belt is good for you.' (because you have a lot to do)

The experiencer is also interpreted as the agent in the complement clause. We can account for this by assuming that it controls the unexpressed subject of the nominalized complement.

3.4.4.2. Agent oblique phrase experiencer

The other way the experiencer can be realized is by expressing it through the oblique phrase *–umaal,* which is also used to express passive agents. This oblique experiencer, like the dative experiencer discussed above, is also outside the complement.

(89) ø no'jiim [u-keem-ik le paas] **aw-umaal**
B3S slow A3S-weave.PASS-VN DET belt A2S-RN
'It takes you a long time to weave the belt (for you).'

(90) ø aninaq [u-keem-ik le paas] **aw-umaal**
B3S quick A3S-weave.PASS-VN DET belt A2S-RN
'You are fast at weaving the belt.'

(91) ø tzeb'al [u-keem-ik le paas] **aw-umaal**
B3S funny A3S-weave.PASS-VN DET belt A2S-RN
'It is funny the way you weave the belt.'

When the experiencer is indicated by the by phrase *-umaal*, this phrase can remain in final position, but it can also be moved, unlike dative experiencers. The judgments about the movement of this phrase vary from speaker to speaker.

(92) a. [le u-keem-ik le paas] ø aninaq (**aw-umaal**)
DET A3S-weave.PASS-VN DET belt B3S fast A2S-RN
'You are fast at weaving the belt.'

b. ?[le u-keem-ik le paas (**aw-umaal**)] ø aninaq
DET A3S-weave.PASS-VN DET belt A2S-RN B3S fast
'You are fast at weaving the belt.'

In some cases it seems that the choice between the dative form and the agentive form is semantically determined, because there are verbs that allow both with clear differences in meaning. In (93), with the dative, the source of the difficulty is due to external circumstances. For example s/he has many things to do, or s/he is sick. There is a sense that if circumstances were different the task would not be hard.

(93) ø k'ax [u-keem-ik le paas] **ch-aw-e**
B3S bad A3S-weave.PASS-VN DET belt PREP-A2S-RN
'It is hard for you to weave the belt.'

In (94) with the agentive phrase the reason seems to have more to do with the disposition of the experiencer: s/he works very slowly, perhaps for instance because she does not see well or because she is a little old. The feeling is that the conditions cannot change to make the work easier.

(94) ø k'ax [u-keem-ik le paas] **aw-umaal**
B3S bad A3S-weave.PASS-VN DET belt A2S-RN
'It is hard for you to weave the belt.'

Although in (93–94) there seems to be a semantic difference between the two phrases, this is not always the case. For example, (95) and (96) have the same structure, but it is difficult to find a context where (95) with *-umaal* could be used, while (96) with the dative is felicitous. This suggests that not all transitive nominalizations can take both dative and agent phrases.

(95) *ø k'ax [r-iil-ik le ak'aal] **aw-umaal**
B3S bad A3S-see.PASS-VN DET child A2S-RN
Intended reading: 'It is difficult for you to take care of the child.'

(96) ø k'ax [r-iil-ik le ak'aal] **ch-aw-e**
B3S bad A3S-see.PASS-VN DET child PREP-A2S-RN
'It is difficult for you to take care of the child.'

In this study I only propose the meanings for the two forms of expressing the experiencer with the same predicate. I do recognize that not every verb can accept both forms, but I do not include the types of verbs that accept both forms: I will leave that for a future study.

It seems that when the verbal noun is intransitive or antipassive, the experiencer can be expressed by the agent oblique phrase only. The grammaticality of (97) with the agent oblique phrase and the ungrammaticality of (98) with the dative case illustrates this.

(97) ø k'ax [wa'-iim] **aw-umaal**
B3S bad eat-VN A2S-RN
'It is hard for you to eat.'

(98) *ø k'ax [wa'-iim] **ch-aw-e**
B3S bad eat-VN PREP-A2S-RN
Intended reading: 'It is hard for you to eat.'

Hopefully with further research an explanation of the use or the choice between the dative and the agentive relational noun can be found.

3.4.5.5. Experiencer as subject

There is a second way to realize the arguments of EA predicates. One way, just discussed above, has the nominalized complement as subject and the experiencer as oblique. The other way, to be discussed here, has the experiencer as subject and the nominalized complement as oblique. This structure is possible for some of the adjectives (*aninaq* 'quick/fast', *no'jim* 'slow', *utz* 'good', *tzeb'al*

'funny', *k'ixib'al* 'shameful') but not for others (*je'lik* 'good', *k'ax* 'hard', and *tzeel* 'bad').

In (99–100) the experiencer is the subject of the matrix predicate. In both examples the predicate agrees with its experiencer. Also in both cases the complement is introduced by the preposition *chi* in its short form *ch*.

(99) **in** no'jiim [**ch**-u-keem-ik le paas]
B1S slow PREP-A3S-weave.PASS-VN DET belt
'I take a long time to weave the belt.'

(100) (le are') ø no'jiim [**ch**-u-keem-ik le paas]
PRO3S B3S slow PREP-A3S-weave.PASS-VN DET belt
'S/he is slow to weave the belt.'

Examples like (101) show that B3s marking on the predicate, as in (100), cannot be used with the complement when the experiencer is third person plural; in such cases Set B agreement is third person plural.

(101) le ixoqiib' **e** no'jiim [ch-u-keem-ik le paas]
DET women B3P slow PREP-A3S-weave.PASS-VN DET belt
'The women are slow to weave the belt.'

The NP at the beginning of the sentence (101) can be in topic or focus position. The details about these positions before the predicate were given in Chapter 2.

In summary, there are non-verbal predicates that I call evaluative adjectives that take non-finite complements. These complements have the same form as when they are complements of verbal predicates. What is interesting here is the expression of the experiencer. I have presented two forms of expressing it: as an

oblique phrase (dative or agent) and as a direct argument. In the first case, the complement is realized as the syntactic subject since it is indexed with the third singular set B on the predicate. However, in the second case, the complement is an oblique, since the matrix predicate can only have one subject and that position is already filled by the experiencer. Therefore the complement is introduced by a preposition.

I would like to highlight that the experiencer is the controller regardless of the manner in which it is expressed. Thus, when the experiencer is an oblique phrase, it controls the subject in the complement clause as well as when the experiencer is the matrix subject.

3.4.5. Light verb *b'an*

There are several constructions in which *b'an* 'make/do' takes a non-finite complement. In some cases it introduces an element of manner into the complement. For example in (102) the non-finite clause functions as the direct object of *b'an*. This sentence does not just mean that the woman did the cooking of the tamalitos, it also implies that she did the cooking in a correct/different way. It further implies that someone else started the cooking incorrectly. This is why I have translated the example with 'fix'.

(102)	x-ø-u-b'an	[u-tzaak	sub']	le	ixoq
	COM-B3S-A3S-make	A3S-cook.PASS	tamalitos	DET	woman
	'The woman fixed the cooking of the tamalitos.'				

This construction is also used to focus a verb phrase in a contrastive context like (103d).

(103) a. x-ø-qa-sik'i-j le ixoq
COM-B3S-A1P-call-ACT DET woman
[ch-u-tzaak-ik sub']
PREP-A3S-cook.PASS.VN tamalitos
'We called/brought the woman to cook tamalitos.'

b. Jee', tajin ka-ø-chapon-ik
AFI PRG INC-B3S-work-SS
'Yes, she is working.'

c. La [u-tzaak-ik k'u sub'] tajin k-ø-u-'an-o?
INT A3S-cook.PASS-VN PART tamalitos PRG INC-B3S-A3S-make-SS
'Is it cooking tamalitos that she is doing?'

d. na [u-tzaak-ik ta sub'] tajin k-ø-u-'an-o
NEG A3S-cook.PASS-VN IRR tamalitos PRG INC-B3S-A3S-make-SS
'No, it is not cooking tamalitos that she is doing'

e. [**u-leej-ik wa]** tajin k-ø-u-'an-o
A3s-make.tortilla.PASS-VN food PRG INC-B3S-A3S-make-SS
'It is making tortillas that she is doing.'

This construction is also used to question a manner of an event.

(104) [**jas** u-tzaak-ik le sub'] x-ø-u-'an-o?
how A3S-cook.PASS-VN DET tamalito COM-B3S-A3S-make-SS
'How did she cook the tamalitos?'

I assume that this comes from a more basic and hypotheticl structure like (105) that becomes grammatical when the complement clause is moved.

(105) x-ø-u-'an-o [**jas** u-tzaak-ik le sub']
COM-B3S-A3S-make-SS how A3S-cook.PASS-VN DET tamalito
Lit: 'S/he did how to cook the tamalito.'

Since *jas* is an interrogative word, it must move to sentence initial position. It appears that it must carry the entire complement with it when it moves. This would be a form of pied-piping.

B'an occurs in a second structure with a non-finite complement, which is also associated with manner. In this structure, the manner element precedes the verb and the complement is introduced by a preposition.

(106) **Aninaq** x-ø-u-b'an [**chi** u-tzaak-ik sub']
quick COM-B3S-A3S-make PREP A3S-cook.PASS-VN tamalito
le ixoq
DET woman
'The woman cooked the tamalitos quickly.'

In this case the manner element must be expressed. The adverb is not part of the complement and the manner can be questioned directly (without pied-piping).

(107) **jas** x-ø-u-b'an [**ch**-u-tzaak-ik sub']
how COM-B3S-A3S-make PREP-A3S-cook.PASS-VN tamalito
le ixoq
DET woman
'How did the woman cook the tamalitos?'

Notice that *b'an* is transitive and that in this second structure the non-finite complement is oblique. It is not clear to me at this point what the direct object of this verb is. We will return to these constructions with *b'an* in the next chapter.[3]

3.5. Summary of the chapter

This chapter covered four main points: the types of complements in K'iche', a transitive analysis of a passive form, evaluative predicates and control relations, and the use of the light transitive verb *b'an* 'make/do'.

First, in this chapter I have shown that there are three types of complement: finite complements with complementizers, or CP-complements (declarative and interrogative); finite complements without complementizers, or S-complements, and non-finite complements. We have seen that syntactically a CP-complement is the most independent complement clause, a non-finite complement is the least independent, and an S-complement is in between the other two types.

A CP-complement, being the most independent complement type of complement, includes elements that are found in simple independent clauses such as polarity, secondary predication, and focus that involves movement. S-complements take secondary predication and focus, but only some complement-taking verbs permit negation in an S-complement. Since S-complements have a less elaborated structure, we expect them not to include some elements that a simple independent clause could include. Non-finite complements do not take any

[3] López (1997) has reported that *b'an* is used to express borrowed verbs from Spanish where the verb *b'an* has the form of an inflected transitive verb and the borrowed verb has its infinitive form in the original language:

(i) xub'an imprimir
'S/he printed it.'

of these elements: polarity, secondary predication, or focus. This is because, as we saw earlier, a non-finite complement has an even less elaborated structure — it is an NP — and therefore there is no space for those elements. The three types of complement proposed in this study are represented in Figure 3.1 as a full CP, in Figure 3.2 as an S-complement (IP), and in Figure 3.4 as an NP or nominalized complement.

Second, in this chapter I presented a transitive analysis for a passive verb form. This form is more complex than a regular passive verbal noun. Structurally, it includes direct and indirect objects as well as instrument and locatives as with other types of verbal nouns. One of the strongest arguments that it should be analyzed as transitive is the control relation. Even when this verb form is passive, the controllee does not correspond to the patient, but to the agent which is not overtly marked. The other argument for a transitive analysis is that this form licenses the use of the reflexive pronoun, which is not licensed by passive verbs.

Third, there is a small group of non-verbal predicates — evaluative adjectives — that take non-finite complement clauses. These predicates have two arguments: the non-finite complement, and an experiencer. The experiencer can be an oblique argument or it can be the subject. In either case, it controls the subject of the complement. Finally, in this chapter we also saw that the transitive verb *b'an* 'make/do' can be a light verb in complement constructions. Thus, *b'an* selects a non-finite complement, and this construction is necessary especially for extraction of manner.

Chapter 4

Finite and non-finite clauses: Further differences

4.1. Introduction

In the previous chapter we saw that there are two basic types of complement clauses: finite and non-finite. Finite complement clauses are divided into three subtypes: declarative complement clauses, interrogative complement clauses, and complement clauses without complementizers. Non-finite complements are nominalized verbs.

One difference between finite and non-finite clauses is that the former bear TAM markers, whereas the latter do not. Another difference has to do with agreement marking. Finite complements have fully inflected verbs, and therefore agreement occurs as expected. Non-finite complements have nominalized verbs that only permit a Set A marker. We have seen that nominalized complements are subject to control relations. And we have seen several other differences between these two types of complements with regard to their internal structure, which I summarize in the following table.

Table 4.1. Structural differences between complement types

	CP-comp	**S-Complement**	**Non-finite comp**
Negation	allowed	not allowed	not allowed
Focus	allowed	allowed	not allowed
Secondary preds	allowed	allowed	not allowed
Control	not obligatory	inherent control	structural control
TAM matching	not obligatory	obligatory	N/A
category of the comp	CP	S	NP

However, there are additional distinctions between these two types of complements, having to do not with their internal structure but with the way they are related to the matrix clause. In this chapter I will discuss the word order in which finite and non-finite clauses occur, the prosody of finite and non-finite complements, the possibility of movement of the complement itself, and the possibility of extraction from the complement. Examination of these phenomena will support the proposal that finite complements are sentence-like, whereas non-finite complements are NP-like.

In the final section of this chapter I will discuss examples like (1), which appear to be non-finite interrogatives.

(1) x-ø-r-il le ali [**jas** u-keem-ik le paas]
COM-B3S-A1S-see DET girl INT A3S-weave.PASS-VN DET belt
'The girl saw how to weave the belt.'

This construction has various surprising properties that I do not discuss now, but later in this chapter (§4.5.2).

4.2. Word order

The basic word order in K'iche' is VOS (Norman and Campbell 1978) as the examples in (2) and (3).[4]

	V	O	S	
(2)	x-ø-u-yup-ub'a	u-wach	ra'chi,	ka-ø-cha',
	COM-B3S-A3S-close-TR	A3S-eye	DET;man	INC-B3S-say
	'The man closed his eyes, they say…'			
				{Can Pixabaj and England 2011:17}

	V	O		S	
(3)	x-ø-ki-tij	jun	ak'	le	ak'alaab'
	COM-B3S-A3P-eat	one	chicken	DET	children
	'The children ate one chicken.'				

In examples in (2) and (3) the object is a noun phrase, but when the object is a non-finite complement, it occurs in the same position before the subject, as in (4) and (5).

	V	O	S	
(4)	x-ø-r-eta'm**a-**j	[**b'in-eem**]	le	ak'aal
	COM-B3S-A3S-know-ACT	walk-VN	DET	child
	'The child learned to walk.'			

[4] England (1991) indicates that this order "is preferred when the subject is definite and the object is indefinite or unmarked", although according to England (1991) VSO can also be considered as a basic word order that occurs mainly "when both the subject and the object are definite".

	V	O	
(5)	x-ø-ki-chap	[u-tij-ik	wa]
	COM-B3S-A1P-start	A3S-eat.PASS-VN	food
	S		
	le ak'alaab'		
	DET child-PL		
	'The children started eating tortillas.'		

Further there are various intransitive predicates with two arguments, one direct and one oblique. In these cases the order is usually direct argument and then oblique argument.

	V	DA	Obl
(7)	x-ø-na'taj	**ri ak'aal**	ch-w-e
	COM-B3S-remember	DET child	PREP-A1S-RN
	'I remembered the child.'		

(8)	x-ø-sachon	**ri nu-chaak**	ch-w-e
	COM-B3S-forget	DET A1S-work	PREP-A1S-RN
	'I forgot my work.'		

(9)	ø No'jim	**chak**	w-umaal
	B3S slow	work	A1S-RN
	'I am slow at work.'		

When the direct argument is a nominalized complement the order stays the same and the direct argument also precedes the oblique, as in (10):

(10) x-ø-na'taj [wa'-iim] **ch-w-e**
COM-B3S-remember eat-VN PREP-A1S-RN
'I remembered to eat'

(11) ø no'jimaal [u-keem-ik le paas] **aw-umaal**
B3S slow A3S-weave.PASS-VN DET belt A2S-RN
'You are slow at weaving the belt.'

In other words, non-finite complements show the same word order behavior as ordinary NPs.

However, finite complements show different behavior. If the object is a finite complement, it must follow the subject, and the order must be VSO, as in (12).

V S O
(12) x-ø-k-eta'ma-j le winaq [chi x-u'l le ajtijaab']
COM-B3S-A3P-know-ACT DET people COMP COM-B3P.come DET teachers
'People knew that the teachers arrive.'

Examples with VOS order are ungrammatical, as in (13), if they are pronounced as one intonational phrase (but become grammatical or acceptable if they are pronounced as two phrases).

V O S
(13) *x-ø-k-eta'maa-j [chi x-u'l le ajtijaab'] le winaq
COM-B3S-A3P-know-ACT COMP COM-B3P.come DET teachers DET people
Intended reading: 'People knew that the teachers arrive.'

When the matrix clause has a ditransitive verb with an overt indirect object, and with a finite clause as its direct object, the direct object must follow the indirect object as in (14).

	V	S	IO	
(14)	x-ø-ki-b'ij	le alitomaab'	ch-e	le ak'aal
	COM-B3S-A3P-tell	DET girls	PREP-RN:to	DET child
	DO			
	[chi ka-ø-wa'	u-tukeel]		
	COMP INC-B3S-eat	A3S-alone		
	'The girls told the child to eat alone.'			

Based on the examples above, we can see that finite complements must be extraposed, resulting in VSO order. In this case it seems that the complexity of the object favors the occurrence of VSO order since the complement clause contains a predicate. This is not surprising, since Norman and Campbell (1978) have already claimed that when the object is complex it must be extraposed to sentence final position, as demonstrated in (15). This is also described by Mondloch (1981) and Larsen (1988), although note that England (1991) suggests that the complexity of the object is not the only factor responsible for VSO order.

	V	S				
(15)	x-ø-k-il	le	winaq			
	COM-B3S-A3P-see	DET	people			
	O					
	le nim-alaj k'am-ol	b'e	r-eech	we	tinamit	
	DET big.TNS receive-AGT	road	A3S-RN	DET	town	
	'People saw the very important leader of the town.'					

The VOS order with a complex O sounds odd s one intonational phrase, but it becomes completely grammatical if there is a pause before the subject which seems to be used in contexts where the S is added as an afterthought.

	V	O				
(16)	%x-ø-k-il	le	nim-alaj	k'am-ol	b'e	r-eech
	COM-B3S-A3P-see	DET	big-TNS	receive-AGT	road	A3S-RN
	S					
	we tinamit	le	winaq			
	DET town	DET	people			

'People saw the very important leader of the town.'

When a transitive sentence has two complex arguments, a finite object and a complex NP subject, the extraposition of the finite complement takes priority and it occurs sentence finally, as in (17).

	V	S				
(17)	x-ø-u-ta	le	nim-alaj	k'am-ol	b'e	r-eech
	COM-B3S-A3S-hear	DET	big-TNS	receive-AGT	road	A3S-RN
	O					
	we tinamit	[chi	x-u'l	le	ajtijaab']	
	DET town	COMP	COM-B3P.come	DET	teachers	

'The very important leader of this town knew that teachers arrived.'

Therefore extraposition of O can be due to its status as a finite complement, or to its complexity as an NP.

Finite complements without complementizers must also extrapose, leading to VSO order, as seen in (19).

	V	S	O
(19)	ka-ø-k-aj	le ak'alaab'	[k-e-wa'-ik]
	INC-B3S-A3P-want	DET children	INC-B3P-eat-SS
	'Children want to eat'		

Extraposition with this type of complement is obligatory. If the finite clause does not extrapose, as in (20a), the result is ungrammatical.

(20)	*ka-ø-k-aj	[k-e-wa'-ik]	le ak'alaab'
	INC-B3S-A3P-want	INC-B3P-eat-SS	DET children
	Intended reading: 'Children want to eat'		

When the complement is non-finite, the order is VOS, as when the object is an ordinary NP.

	V	O	S
(21)	x-ø-r-eta'ma-j	[**b'in-eem**]	le ak'aal
	COM-B3S-A3S-know-ACT	walk-VN	DET child
	'The child learned to walk.'		

	V	O	
(22)	x-ø-ki-chap	[u-tiij-ik	wa]
	COM-B3S-A1P-start	A3S-eat.PASS-VN	food
	S		
	le ak'al-aab'		
	DET child-PL		
	'The children started eating food.'		

This is the only possible order (VOS). VSO is ungrammatical.

(23) *x-ø-r-eta'm**a**-j le ak'aal [**b'in-eem**]
COM-B3S-A3S-know-ACT DET child walk-VN
Intended reading: 'The child learned to walk.'

To summarize: finite complements require extraposition, while non-finite complements need not (and indeed cannot) be extraposed. This is consistent with the analysis I have proposed, according to which finite complements have the external syntax of clauses while non-finite complements have the external syntax of NPs.

4.3. Prosody

We saw in Chapter 2 that there are a number of elements which have long and short forms, including the status suffixes, directionals, and the interrogative and negative particles. I will refer to these as 'alternating morphemes'. Following Henderson (2012) I will assume that the long forms occur when the element occurs at the end of an intonational phrase, and the short forms when the element is not at the end of the intonational phrase. In this section I consider alternating morphemes as diagnostics for prosodic structure in sentences containing complement clauses. We will see that finite and non-finite clauses behave differently: finite clauses are separate intonational phrases, while non-finite clauses are not.

Table 4.2. Alternating Morphemes Forms

Alternating morphemes	Long forms	Short forms
Status suffix for intr. verbs and positionals	*-ik*	*Ø*
Status suffix root transitive verbs	*-o/-u*	*Ø*
VV final syllable of derived trans. verbs	*VV*	*V*
Irrealis particle	*taj*	*ta*
Particle	*chik*	*chi*
2nd interrogation particle	*k'ut*	*k'u*
Directionals	*-oq, -(i)k*	*Ø*
Transitive verbs from positionals	*-b'aa'*	*-b'a*

When an alternating morpheme occurs before a simple NP, it takes the short form. In (24a) the verb *ch'ob'* takes the suffix with the long form *-o*, but in (24b) this suffix occurs in its short form (*-ø*) before the NP *sin kaanma* 'their hearts'.

(24) a. Jas nu k'u k-ø-u-ch'ob'-**o**
INT PART PART INC-B3S-A3S-think-SS
'Who knows what s/he thinks.'

b. Jas nu k'u k-ø-u-ch'ob' [**sin** **k-aanma**...]NP
INT PART PART INC-B3S-A3S-think PART A3P-heart
'Who knows what they want.'
(Lit: 'Who knows what their hearts want.' {R012I002:167}

In (25a) the suffix has its long form *–ik* clause-finally, and in (25b) it takes its short form before the NP *le ak'aal* 'the child'.

(25) a. x-ø-wa'-**ik**
COM-B3S-eat-SS
'S/he ate.'

b. x-ø-wa' [**le ak'aal**]$_{NP}$
COM-B3S-eat DET child
'The child ate.'

This shows that an NP is not a separate intonational phrase, but is part of the same intonational phrase as the predicate. There is no intonational phrase break between the verb and its simple NP object or subject.

When the DO is a non-finite complement as in (26b), we find short forms of alternating morphemes, just as we did in (24b) and (25b). In (26a) the vowel of the last syllable of the matrix verb is long because it is in final position, but in non-final position it is shortened as in (26b).

(26) a. x-ø-r-eta'm**aa**-j
COM-B3S-A3S-know-ACT
'S/he learned it.'

b. x-ø-r-eta'm**a**-j [**b'in-eem**] le ak'aal
COM-B3S-A3S-know-ACT walk-VN DET child
'The child learned to walk.'

If the matrix clause and the nominalized complement were two different intonational phrases, in (26b) we would expect the last element of the matrix clause to have its long form before the nominalized complement, but this is not

the case. Similarly, in (27a) the directional has its short form before the non-finite complement. The long form is ungrammatical, as (27b) shows.

(27) a. x-ø-r-eta'ma-j **lo** [b'in-eem] le ak'aal
COM-B3S-A3S-know-ACT DIR walk-VN DET child
'The child learned to walk.'

b. *x-ø-r-eta'ma-j **loq** [b'in-eem] le ak'aal
COM-B3S-A3S-know-ACT DIR walk-VN DET child
Intended reading: 'The child learned to walk.'

Other alternating morphemes show the same behavior: (28) illustrates that *chik* must have its short form *chi*, and (29) shows that *taj* must have its short form *ta*.

(28) x-ø-u-maj **chi** *(chik) [wa'-iim].
COM-B3S-A3S-start PART eat-VN
'S/he started eating again.'

(29) **na** x-oj-ki-ya' **ta** *(taj) [pa kuna-x-ik]
NEG COM-B1P-A3P-give IRR PREP cure-PASS-VN
'They did not allow us to be cured.'

This shows again that there is no intonational phrase break between the verb and its non-finite complement.

However, alternating morphemes take their long forms before a finite complement with complementizer. In (30) we see that the verb occurs in its long form before the finite complement.

(30) x-ø-q-il-**o** [chi k-ø-u-k'am rajil
COM-B3S-A1P-see-SS COMP INC-B3S-A3S-recieve money
le asosyasyon]
DET association
'We realized that the association needs money.'
{R146I002:104}

This means that there is an intonational phrase break between the matrix verb and its finite complement. Therefore the preceding verb occurs in the final position of its intonational phrase. In (30) final element in the predicate is a verb and it occurs in its long form with the status suffix *-o*. In (31) the verb is no longer final in its intonational phrase. Instead it is the irrealis particle *taj* that is in final position and it occurs in its long form. And in (32) the irrealis is no longer final in its clause. These examples show that the intonational phrase break is always associated with the left edge of the finite complement.

(31) na x-ø-q-il **taj** [chi k-ø-u-k'am rajil
NEG COM-B3S-A1P-see IRR PREP INC-B3S-A3S-recieve money
le asosyasyon]
DET association
'We did not realize that the association needs money.'
{Modified from R146I002:104}

(32) na x-ø-q-il **ta** **chik** [chi k-ø-u-k'am rajil
NEG COM-B3S-A1P-see IRR PART COMP INC-B3S-A3S-recieve money

le asosyasyon]
DET association
'We did not realize anymore that the association needs money.'
{Modified from R146I002:104}

We also find long forms of alternating morphemes before interrogative complements.

(33) na x-ø-in-ta **taj** [we k-ix-ki-tzuq-u]
NEG COM-B3S-A1S-hear IRR COMP INC-B2P-A3P-feed-SS
'I did not hear whether they will feed you or not.'

And the long forms of the alternating morphemes also occur before finite complements without complementizers. In (34a) the verb has long form, so it must be at the end of its intonational phrase. In (34b) the verb it is not at the end of its intonational phrase, so it cannot have its long form; instead, the irrealis particle is at the end of its intonational phrase, therefore it must be in its long form.

(34) a. entonses are k'-wa' le k-ø-aw-**aa**-j [k-ø-in-b'ij
then FOC PART.DEM DET INC-B3S-A2S-want-ACT INC-B3S-A1S-say
pan in]
DIR PRO1S
'Then this is what I would like to say.' {R069I001:027}

b. na x-ø-w-a-j **taj** [x-ø-in-b'ii-j]
NEG COM-B3S-A1S-want-ACT IRR COM-B3S-A1S-tell-ACT
'I did not want to say.'

c. na x-ø-w-aj **ta chik** [x-ø-in-b'ii-j]
NEG COM-B3S-A1S-want IRR PART COM-B3S-A1S-tell-ACT
'I did not want to say.'

The use of the long forms before finite complement clauses, whether they have a complementizer or not, shows that these are independent intonational phrases.

The short forms of the particles occur when the complement is non-finite, regardless of whether this clause functions as a direct or an oblique argument. This shows that non-finite complement clauses are more integrated to the matrix predicates at a higher level. Also, this is evidence that non-finite complement clauses are more NP-like at this level of the clause, external syntax.

4.4. Movement of the complement

There are two constructions which arguably involve movement of a complement clause. In one case, that of focus fronting, I will argue that movement of a complement clause genuinely does occur. In the other case, which Craig (1977) describes as "inversion" of a complement clause, I will argue that what appears to be a moved complement clause is really a matrix clause, and what appears to be a matrix clause is really a parenthetical. Fronting of focus phrases is possible for non-finite complements, but not for finite complements. Inversion is possible for some finite complements, but not for non-finite complements. In this section I will discuss focus fronting, and I will discuss inversion in the next section.

As explained in Chapters 2 and 3, there is a position of focus to the left or at the begining of the sentence. I follow Aissen (1992) in assuming this focus position is in the IP (specifier of IP). Elements that can be fronted into this position in K'iche' include NPs and prepositional phrases.

In (35) and (36) are examples of focused NPs. The focus particle is not required in (35) because the noun does not contain a determiner (or because it is not definite), but when the NP contains a determiner, the focus particle *are* must occur as in (36).

(35) **ak'alaab'** x-e-wa' waraal
children COM-B3P-eat here
'It was children who ate here.'

(36) **are** **r-in-taat** x-i'l-ow-ik,
FOC DET-A1S-father COM-B3P.see-AF-SS
in, na x-ø-inw-il taj
PRO1S NEG COM-B3S-A1S-see IRR
'…it was my parents who saw it, I didn't see it.'
{Can Pixabaj and England, 2011:18}

Recall that when the focused element is a prepositional phrase, *wi* is required after the verb, as in (36).

(36) **p-uleew** x-e-war **wi** le ak'al-aab'
PREP-floor COM-B3P-sleep FOC DET children
'It was on the floor that the children slept.'

Nominalized complements can also move to focus position. In (37) the nominalized verb is intransitive and in (38) it is transitive.

(37)a. x-ø-u-chap [**wa'-iim**]
COM-B3S-A3S-start eat-VN
'S/he started eating.'

b. [**wa'-iim**] x-ø-u-chap-o
eat-VN COM-B3S-A3S-start-SS
'It is eating that s/he started.'

(38)a. x-ø-r-eta'ma-j [**ki-kuna-x-ik** ak'al-aab']
COM-B3S-A3S-learn-ACT A3P-cure-PASS-VN child-PL
'S/he learned to cure children.'

b. [**ki-kuna-x-ik** ak'al-aab'] x-ø-r-eta'maa-j
A3P-cure-PASS-VN child-PL COM-B3S-A3S-know-ACT
'Curing children is what s/he learned.'

If the verbal noun is preceded by a determiner, as in (39), the focus particle *are* has to occur.

(39) [**Are** **le** u-keem-ik pas] x-ø-r-eta'maa-j
FOC DET A3S-weave.PASS-VN belt COM-B3S-A3S-know-ACT
'What s/he learned was to weave belts.'

When the nominalized verb phrase is the object of a preposition, that prepositional phrase can also move to the focus position, as in (41), and therefore the particle *wi* occurs since there is movement of a prepositional phrase.

(40) x-ø-u-taqchi'-j [pa war-aam]
COM-B3S-A3S-force-ACT PREP sleep-VN
'S/he forced him/her to sleep.'

(41) [pa war-aam] x-ø-u-taqchi'-j **wi**
PREP sleep-VN COM-B3S-A3S-force-ACT FOC
'What s/he forced him/her to do was to sleep.'

(42) x-e-u-taqchi'-j [chi r-elaq'a-x-ik kinaq']
COM-B3P-A3S-force-ACT PREP A3S-steal-PASS-VN beans
'S/he forced them to steal beans.'

(43) [chi r-elaq'a-x-ik kinaq'] x-e-u-taqchi'-j **wi**
PREP A3S-steal-PASS-VN beans COM-B3P-A3S-force-ACT FOC
'What s/he forced them to do was to steal beans.'

To sum up, fronting focus is another behavior which nominalized complements share with ordinary NPs.

However, finite complements cannot be moved to the focus position. The example in (44) shows the normal order, but the complement cannot be preposed either with the complementizer (45a) or without it (45b).

(44) x-ø-q-il-o [chi k-ø-u-k'am rajil
COM-B3S-A1P-see-SS COMP INC-B3S-A3S-recieve money
le asosyasyon]
DET association
'We realized that the association needs money.' {R146I002:104}

(45) a. *[**chi** k-ø-u-k'am rajil
COMP INC-B3S-A3S-recieve money
le asosyasyon] x-ø-q-il-o
DET association COM-B3S-A1P-see-SS
Intended reading: 'We realized that the association needs money.'
{Modified from R146I002:104}

b. *[k-ø-u-k'am rajil le asosyasyon]
INC-B3S-A3S-recieve money DET association
x-ø-q-il-o
COM-B3S-A1P-see-SS
Intended reading: 'We realized that the association needs money.'
{Modified from R146I002:104}

Finite complements without complementizers cannot move to focus position either, as (46b) shows.

(46) a. k-ø-in-q'i'-o [k-in-atin pa joron]
INC-B3S-A1S-endure-SS INC-A1S-bathe PREP cold.water
'I endure showering in cold water.'

b. *[k-in-atin pa joron] k-ø-in-q'i'-o
INC-A1S-bathe PREP cold.water INC-B3S-A1S-endure-SS
Intended reading: 'I endure showering in cold water.'

There is a second construction that may involve movement of the complement. This construction has been called "inversion" in the Mayan

literature (Craig 1977:259). In this construction a finite complement clause appears to the left of the main verb.

(47) [x-at-wa'-ik] x-ø-inw-il-o
COM-B2S-eat-SS COM-B3S-A1S-see-SS
'I saw/realized that you ate.'

(48) [k-at-'ee-k] x-ø-in-ta
INC-B2S-go-SS COM-B3S-A1S-hear
'I heard that you are going to leave.'

I have identified five matrix verbs which permit this construction in K'iche':[5]

(49) a. *iil* 'see/realize'
b. *ta* 'hear'
c. *na'* 'feel/have a feeling'
d. *b'iij* 'think'
e. *aaj* 'want'

These are all complement taking predicates.

There are two possible analyses for this "inversion" construction. One possibility is that sentences like (47) and (48) are derived from more basic

[5] In other Mayan languages such as Mam (England 2005) Tsotsil (Haviland 2002), and others, verbs of perception and knowledge as the K'iche' ones listed in (49) are evidential or epistemic verbs. In those languages verbs with such functions occur at the end of the sentence. This suggests that there is an association between 'inversion' and evidentiality that may occur in K'iche' in the future.

structures in which the initial clause follows the verb as its complement. In this analysis (47-48) will be derived from (50-51). Then, we have to assume that in the preposing process the complementizer must be deleted.

(50) x-ø-inw-il-o [chi x-at-wa'-ik]
COM-B2S-eat-SS COMP COM-B3S-A1S-see-SS
'I saw/realized that you ate.'

(51) x-ø-in-ta [chi k-at-'ee-k]
COM-B3S-A1S-hear PREP INC-B2S-go-SS
'I heard that you are going to leave.'

The other possible analysis is that the initial clause (47-48) is never embedded as a complement. It is the main clause which is also the last element (*xinwilo* and *xinta*) that is a kind of comment or parenthetical or evidential element.

There are several reasons why the second analysis seems better than the first. One is that not all the verbs in (49) take complement clauses with the appropriate meaning. *B'iij* occurs in the inversion construction with the meaning 'think' and not 'say'.

(52) [k-in-'ee-k] k-ø-in-b'ii-j
INC-B1S-go-SS INC-B3S-A1S-say-ACT
'I am thinking about going.'

B'iij takes a finite complement with *chi*, but not with the meaning 'think', only with the meaning 'say', as in (53).

(53) x-ø-in-b'ii-j [chi k-in-'ee-k]
COM-B3S-A1S-say-ACT PREP INC-B1S-go-SS
'I said that I would go.'

Another problem for the inversion analysis is that once the complement is preposed, it has the status of a main clause. One sign of this is that the complementizer *chi* cannot appear, as the ungrammatical examples in (54) illustrate.

(54) a. *[**chi** x-at-wa'-ik] x-ø-inw-il-o
COMP COM-B2S-eat-SS COM-B3S-A1S-see-SS
Intended reading: 'I saw/realized that you ate.'

b. *[**chi** k-in-'ee-k] k-ø-in-b'ii-j
COMP INC-B1S-go-SS INC-B3S-A1S-say-ACT
Intended reading: 'I am thinking about going.'

Another sign is that the initial clause can be interrogative. When it is interrogative it is introduced by the yes/no particle *la*, which is found only in main clause constructions.

(55) a. **la** k-at-'e k'ut k-ø-a-b'ii-j?
INT INC-B2S-go PART INC-B3S-A2S-think-ACT
'Are you thinking about going?'

b. **la** x-ø-a-tij k'u le wa?
INT COM-B3S-A2S-eat PART DET food
'Did you eat the food?'

It cannot be introduced by *we*, as in (56), which is the interrogative particle (complementizer) found in complement questions, as in (57).

(56) ***we** k-at-'ee-k k-ø-a-b'ii-j?
INT INC-B2S-go INC-B3S-A2S-say-ACT
Intended reading: 'Are you thinking about going?'

(57) x-ø-u-ta [**we** k-at-'ee-k]
COM-B3S-A3S-ask INT INC-B2S-go-SS
'S/he asked whether you go.'

If the second analysis, the parenthetical analysis, is correct, then movement is not involved and therefore it is not directly relevant to complementation itself, but it can be confused with it.

In summary, there are five matrix verbs that seem to allow inversion; these verbs follow what seems to be a complement. But I argue that this structure really involves a parenthetical, rather than a moved complement clause. The reasons are, first, that the first verb occurs without a complementizer if it has one in the common order; second, that not all the inverted forms can occur in a complement clause; and third, that when the first verb is questioned, it occurs with the interrogative particle *la* that is used in simple independent clauses and not with the interrogative particle *we* which is used in interrogative complements.

4.5. Extraction from the complement

In this section I will consider the possibility of extraction from finite and non-finite complements to see whether they behave the same or differently. We will see that although there are some differences, the basic distinction is not between

finite and non-finite complements, but between complements with a complementizer (CP) and complements without a complementizer (NP and IP=S).

4.5.1. Extraction of arguments

I will first consider extraction of objects from complements. Recall that objects can be extracted from matrix clauses with no special morphology, as in (58).

	V	O	S
(58) a.	x-ø-u-tij	**kar**	le ak'aal
	COM-B3S-A3S-eat	fish	DET child
	'The child ate fish.'		

b. **jas** x-ø-u-tij le ak'aal?
what COM-B3S-A3S-eat DET child
'What did the child eat?'

In (59) and (60), I show that object extraction is also possible from a nominalized transitive complement.

(59) a. x-ø-u-chap [u-tiij-ik **kar**] le ak'aal
COM-B3S-A3S-begin A3S-eat.PASS-VN fish DET child
'The child began to eat fish.'

b. **jas** x-ø-u-chap [u-tij-ik ___] le ak'aal?
INT COM-B3S-A3S-begin A3S-eat.PASS-VN DET child-PL
'What did the child begin to eat?'

(60) a. x-ø-a-taqchi'-j le ak'aal [ch-u-tiij-ik kar]
COM-B3S-A2S-force-ACT DET child PREP-A3S-eat.PASS-VN fish
'You forced the child to eat fish.'

b. **jas** x-ø-a-taqchi'-j le ak'aal [ch-u-tiij-iik __]?
INT COM-B3S-A3S-begin-ACT DET child PREP-A3S-eat.PASS-VN
'What did you force the boy to eat?'

Finite complements without complementizers also allow extraction as illustrated in (61) and (62).

(61) a. ka-ø-r-aaj [k-ø-u-tij **ak'**]
INC-B3S-A3S-want INC-B3S-A3S-eat chicken
'S/he wants to eat chicken.'

b. **jas** ka-ø-r-aaj [k-ø-u-tij-o ___]?
what INC-B3S-A3S-want INC-B3S-A3S-eat-SS
'What does s/he want to eat?'

(62) a. x-ø-u-rayi-j le a-naan x-ø-u-tij ichaaj
COM-B3S-A3S-desire-ACT DET A2S-mother COM-B3S-A3S-eat greens
'You mother wanted to eat greens.'

b. **jas** x-ø-u-rayi-j le a-naan [x-ø-u-tij-o ___]?
what COM-B3S-A3S-desire-ACT DET A2S-mother COM-B3S-A3S-eat-SS
'What does your mother want to eat?'

(63) a. x-ø-sachon ch-q-e [x-ø-qa-ch'aj **le laq**]
COM-B3S-forget PREP-A1P-RN COM-B3S-A1P-wash DET dish
'We forgot to wash the dishes.'

b. **jas** x-ø-sachon ch-q-e [x-ø-qa-ch'aj-o ___]
what COM-B3S-forget PREP-A1P-RN COM-B3S-A1P-wash
'What did we forget to wash?'

We will look again at extraction from this kind of complement (finite without complementizer) in the next chapter.

Extracting the object from a finite complement with complementizer is more variable. In some cases the result is fully grammatical, as in (64), in others it strikes me as questionable, as in (65), and in others it is ungrammatical, as in (66).

(64) a. x-ø-aw-il-o [chi x-ø-u-tij **ti'iij** le tz'i']
COM-B3S-A2S-see-SS COMP COM-B3S-A3S-eat meat DET dog
'You saw that the dog ate meat.'

b. **jas** x-ø-aw-il-o [chi x-ø-u-tij __ le tz'i']?
what COM-B3S-A2S-see-SS COMP COM-B3S-A3S-eat DET dog
'What did you see that the dog ate?'

(65) a. x-ø-ki-b'ij [chi x-ø-k-il **le elaq'oom**]
COM-B3S-A3P-say COMP COM-B3S-A3P-see DET thief
'They said that they saw the thief.'

b. ?**jas** x-ø-ki-b'ij [chi x-ø-k-il-o _]?
what COM-B3S-A3P-say COMP COM-B3S-A3P-see-SS
'What did they say that they saw.'

(66) a. x-ø-sachon ch-aw-e [chi x-ø-ki-tij le ti'iij]
COM-B3S-forget PREP-A2S-RN COMP COM-B3S-A3P-eat DET meat
'You forgot that they ate meat.'

b. *jas x-ø-sachon ch-aw-e [chi x-ø-ki-tij-o __]?
what COM-B3S-foget PREP-A2S-RN COMP COM-B3S-A3P-eat-SS
Intended reading: 'What did you forget that they ate?'

The extraction of a transitive subject from a matrix clause requires that the transitive verb must be changed to antipassive as in the following examples:

(67) a. k-ø-u-mes le ja **le** **achi** ronojel q'iij
INC-B3S-A3S-sweep DET house DET man every day
'The man sweeps the house every day.'

b. **ri** **achi**, ri ka-ø-mes-**ow** ri ja ronojel q'iij
DET man DET INC-B3S-A3S-sweep DET house every day
'The man who sweeps the house every day'

The extraction of the agent from a complement is also possible and it follows the same rule as when it is extracted from a matrix predicate. The complement verb must be changed from active to antipassive.

(68) a. ?**jachin** x-ø-aw-il-o [chi x-ø-u-tij ri ti'iij]?
who COM-B3S-A2S-see-SS COMP COM-B3S-A3S-eat DET meat
Intended reading: 'Who did you see that ate the meat?'

b. **jachin** x-ø-aw-il-o [chi **are x-ø-tij-ow**
who COM-B3S-A2S-see-SS COMP FOC COM-B3-eat-AP
ri ti'iij]?
DET meat
'Who did you see that ate the meat?'

Another option is to extract from the parenthetical structure as in (69a). In some cases the extraction from the inverted verb seems preferable. However the inversion examples are analyzed, examples like (69b-c), are fully grammatical because the extraction does not cross any clause boundary.

(69) a. [**jas** x-ø-u-tij ___ le ala] x-ø-aw-il-o?
what COM-B3S-A3S-eat DET boy COM-B3S-A2S-see-SS
'What did the boy eat you saw?'

b. [**jas** x-ø-u-k'am b'i __ le tz'i'] x-ø-aw-il-o?
what COM-B3S-A3S-receive DIR DET dog COM-B3S-A2S-see-SS
'What did the dog take you saw?'

c. [**jas** x-ø-ki-yak-o___] x-ø-a-ta?
what COM-B3S-A3P-lift-SS COM-B3S-A2S-hear
'What did they lift you heard.'

4.5.2. Extraction of prepositional phrases

In Chapter 2 we saw that the extraction of prepositional phrases from simple clauses requires the occurrence of the particle *wi* after the main verb. This is shown in examples (70b) and (71b).

(70) a. x-ø-ki-tij le ki-rikiil **r-uk'** **paak'**
COM-B3S-A3P-eat DET A3P-food A3S-RN spoon
'They ate their food with spoon.'

b. **jas** **r-uuk'** x-ø-ki-tij **wi** le ki-rikiil?
what A3S-RN COM-B3S-A3P-eat FOC DET A3P-food
'With what did they eat their food?'

(71) a. x-ø-u-paqchi-j b'i le ak'aal **pa** **le** **ja'**?
COM-B3S-A3S-push-ACT DIR DET child PREP DET water
'S/he pushed the child into the river.'

b. **jawi** x-ø-u-paqchi-j **wi** ub'i le ak'aal?
where COM-B3S-A3S-push-ACT FOC DIR DET child
'Where did s/he push the boy?'

If we consider extraction of a prepositional phrase from a complement clause we see some interesting differences among different complement types. When an instrument is extracted from a finite complement without a complementizer, an S/IP complement, *wi* appears after the complement verb.

(72) **jas r-uuk'** k-ø-aw-aaj [k-ø-a-choy **wi** le sii']?
INT A3S-RN INC-B3S-A2S-want INC-B3S-A2S-cut FOC DET firewood
'With what do you want to cut firewood'?

(73) **jas r-uuk'** k-ø-a-rayii-j [k-ø-a-tij **wi** le wa]?
INT A3S-RN INC-B3S-A2S-desire-ACT INC-B3S-A2S-eat FOC DET food
'With what do you desire to eat the food.'

Wi only appears attached to the lower verb, as in the examples (72-73), and not to the main verb, as in the examples (74-75).

(74) *jas r-uuk' k-ø-aw-aaj **wi** [k-ø-a-choy le sii']?
INT A3S-RN INC-B3S-A2S-want FOC INC-B3S-A2S-cut DET firewood
Intended reading: 'With what do you want to cut the firewood'?

(75) *jas r-uuk' k-ø-a-rayii-j **wi** [k-ø-a-tij le wa]?
INT A3S-RN INC-B3S-A2S-desire-ACT FOC INC-B3S-A2S-eat DET food
Intended reading: 'With what do you disire to eat the food.'

From these facts we can conclude that *wi* attaches within the clause from which the prepositional phrase moves. However, when the prepositional phrase moves from a non-finite complement, *wi* appears on the main verb as the examples (b) below show, not on the nominalized verb as the examples in (c) show.

(76) a. x-ø-ki-chap [u-tiij-ik le rikiil **r-uk'** **paak'**]
COM-B3S-A3P-begin A3S-eat.PASS-VN DET food A3S-RN spoon
'They began eating the food with a spoon.'

b. **jas r-uuk'** x-ø-ki-chap **wi** [u-tiij-ik le rikiil__]?
INT A3S-RN COM-B3S-A3P-begin FOC A3S-eat.PASS-VN DET A3P-food
'With what did they start eating their food?'

c. ***jas r-uuk'** x-ø-ki-chap
INT A3S-RN COM-B3S-A3P-begin
[u-tiij-ik **wi** le rikiil __]?
A3S-eat.PASS-VN FOC DET food
Intended reading: 'With what did they start eating their food?'

(77) a. x-ø-u-taqchi'-j le ak'aal [ch-u-mool-ik ab'aj
COM-B3S-A3S-force-ACT DET child PREP-A3S-gather.PASS-VN stone
pa le ja']?
PREP DET water
'S/he forced the child to gather stones in the river.'

b. **jawi** x-ø-a-taqchi'-j **wi** le ak'aal
where COM-B3S-A2S-force-ACT FOC DET child
[ch-u-mool-ik ab'aj __]?
PREP-A3S-gather.PASS-VN stone
'Where did s/he force the boy to gather stones?'

c. ***jawi** x-ø-a-taqchi'-j le ak'aal
where COM-B3S-A2S-force-ACT DET child
[ch-u-mool-ik **wi** ab'aj __]?
PREP-A3S-gather.PASS-VN FOC stone
Intended reading: 'Where did s/he force the boy to gather stones?'

It appears that *wi* cannot attach to the nominalized verb of a non-finite clause, instead it attaches to the higher matrix verb, if that verb is finite.

An alternative analysis is that the prepositional phrases in examples (76b and (77b) are actually extracted from the main clause. If that is true, then it will still be the case that *wi* attaches to the verb of the clause from which it moves. It is not clear that the meaning of the sentences is compatible with this analysis, but in examples (78-79) it is clear that the prepositional phrase originates in the nominalized complement. Still *wi* must attach to the main verb, not to the complement verb. (The locative semantically seems clearly part of the complement and not part of the matrix.) Thus, the speaker asks where he *should* have left the money, and not where he was *when he forgot* to leave it. It seems that *wi* seeks the closest finite element to attach to.

(78) x-ø-sachon kan [u-ya'-ik le pwaq ch.e
COM-B3S-forget DIR A3S-give-VN DET money PREP-RN
ch-o ja]
PREP-RN house
'He forgot to leave the money at home.'

(79) **jawi** x-ø-sachon **wi** kan [u-ya'-ik le pwaq ch-e_]
where COM-B3S-forget FOC DIR A3S-give-VN DET money PREP-RN
'Where did he forgot to leave the money?'

When we look at extraction from finite complements with complementizers we see a different pattern. The extraction of the instrument from the complement in (80b) leaves *wi* attached to the complement as well as to the main verb.

(80) a. x-ø-aw-il-o [chi x-ø-ki-qupi-j le ti'iij
COM-B3S-A2S-see-SS COMP COM-B3S-A3P-cut-ACT DET meat
r-uk' kuchiilo]
A3S-RN knife
'You saw that they cut the meat with knife.'

b. **jas** **r-uuk'** x-ø-aw-il **wi**
INT A3S-RN COM-B3S-A2S-see FOC
[chi x-ø-ki-qupi-j **wi** le ti'iij]?
COMP COM-B3S-A3P-cut-ACT FOC DET food
'With what did you see that they cut the meat?'

(81) a. x-ø-ki-b'ii-j [chi k-e-'e pa k'ayb'al]
COM-B3S-A3P-say-ACT COMP INC-B3P-go PREP market
'They say that they would go to the market.'

b. **jawi** x-ø-ki-b'i-j **wi**
where COM-B3S-A3P-say-ACT FOC
[chi k-e-'e **wi**]?
COMP INC-B3S-go FOC
'Where did they say that they would go?'

It is not possible to have *wi* only in the complement.

(82) a. ***jas** **r-uuk'** x-ø-aw-il-o
INT A3S-RN COM-B3S-A2S-see-ACT

[chi x-ø-ki-qupi-j **wi** le ti'iij]?
COMP COM-B3S-A3P-cut-ACT FOC DET food
Intended reading: 'With what did you see that they cut the meat?'

b. ***jawi** x-ø-ki-b'ii-j
where COM-B3S-A3P-say-ACT
[chi k-e-'e **wi**]?
COMP INC-B3P-go FOC
Intended reading: 'Where did they say that they would go?'

Nor is it grammatical to have *wi* only in the matrix.

(83) a. ***jas** **r-uuk'** x-ø-aw-il **wi**
INT A3S-RN COM-B3S-A2S-see FOC
[chi x-ø-ki-qupi-j le ti'iij]?
COMP COM-B3S-A3P-cut-ACT DET food
Intended reading: 'With what did you see that they cut the meat?'

b. ***jawi** x-ø-ki-b'i-j **wi**
where COM-B3S-A3P-say-ACT FOC
[chi k-e-'e-k]?
COMP INC-B3P-go-SS
Intended reading: 'Where did they say that they would go?'

The following table summarizes the distribution of *wi* discussed above.

Table 4.3. Trace of prepositional phases

	Main verb	Complement verb
CP	wi	wi
S-complement	---	wi
Non-finite complement	wi	---

The generalization that can be made about the occurrence of *wi* is that *wi* attaches to the closest finite predicate, but not to a non-finite predicate. In Table 4.3 we see that when a prepositional phrase is extracted from a non-finite complement, *wi* attaches to the matrix predicate, since it is the only finite predicate. When the prepositional phrase is extracted from an S-complement, *wi* attaches to the verb in the complement since it is the closest finite predicate. However, when the prepositional phrase is extracted from a CP, copies of *wi* attach not only to the finite predicate in the complement, but also to the matrix finite predicate. Then, the question is "Why does *wi* attach to the matrix finite predicate as well?" A possible answer to this question would be that the distribution of *wi* has to do with the complementizer, since CP-complements have a complementizer. The double occurrence of *wi* may show that the PP moves in two steps, first to the front of its own complement CP and then to the front of the matrix CP. This double movement is reflected by the two occurrences of *wi*. This suggests that the extraction of the PP from S and non-finite complements take only one step, and therefore *wi* occurs only once.

So far, the extraction of prepositional phrases is the only mechanism that distinguishes the three types of complements by the presence of *wi* as is shown in table 4.3 above.

4.5.3. Extraction of manner

In Chapter 3 we saw that extraction of manner requires the use of *b'an* 'make/do' as a light verb and a nominalized complement. We saw that *b'an* occurs in two structures. In one the manner element is embedded in the nominalized complement and when it is extracted the whole nominalized complement moves to sentence-initial position, as in (84b).

(84) a. x-ø-u-'an [u-tzaak-ik le sub']
COM-B3S-A3S-make A3S-cook.PASS-VN DET tamalito
'She fixed the cooking of the tamalitos.'

b. [**jas** u-tzaak-ik le sub'] x-ø-u-'an-o?
how A3S-cook.PASS-VN DET tamalito COM-B3S-A3S-make-SS
'How did she cook the tamalitos?'

In the second structure the manner element *jas* 'how' is outside of the nominalized complement and the complement is introduced by the preposition *chi*. In this case there is no pied-piping, as in (85).

(85) **jas** x-ø-u-b'an [**ch**-u-tzaak-ik sub']
how COM-B3S-A3S-make PREP-A3S-cook.PASS-VN tamalito
'How did she cook the tamalitos.'

Using the second structure, in which *jas* 'how' is outside of the nominalized complement, it is also possible to extract from finite complements without complementizers as in (86), and from finite complements with complementizers as in (87). Examples in (a) are the basic and hypothetical structures.

(86) a. k-ø-r-aaj [$_{manner}$ k-ø-a-tzak le ti'iij]
INC-B3S-A3S-want INC-B3S-A2S-cook DET meat
'S/he wants you to cook the meat.'

b. **jas** ka-ø-r-aaj [k-ø-a-'an
how INC-B3S-A3S-want INC-B3S-A2S-make
[ch-u-tzaak-ik le ti'iij]]?
PREP-A3S-cook.PASS-VN DET meat
'How does she wants you to cook the meat?'

(87) a. x-ø-u-b'iij [chi $_{manner}$ k-ø-a-tzak le ti'iij
COM-B3S-A3S-say COMP INC-B3S-A2S-cook DET meat
'S/he said that you cook the meat.'

b. **jas** x-ø-u-b'iij [**chi** k-ø-a-'an
how COM-B3S-A3S-say COMP INC-B3S-A2S-make
[ch-u-tzaak-ik le ti'iij]]
PREP-A3S-cook.PASS-VN DET meat
'How did she say that you cook the meat?

Notice that in both cases (86b and (87b) when manner is extracted, the verb *b'an* appears, and the original complement verb is nominalized as a requirement of the verb *b'an*.

So far, we have seen that *b'an* is mainly used when the manner element is extracted. We have seen examples where *jas* 'how', is the first element in the sentence within a non-finite complement, as in (84b), but also in sentence-initial position, it can precede the light verb as in (85) or the main verb as in (86b and 87b). However, there is more on constructions with the verb *b'an* 'make/do'. *Jas*

can be embedded in a higher verb, like *eta'maaj* 'learn' and *b'iij* 'say', as in (88) which is different from the other cases.

(88) a. x-ø-inw-eta'maaj [**jas** u-tzaak-ik sub']
COM-B3S-A1S-learn how A3S-cook.PASS-VN tamalito
'I learned how to cook tamalitos'

b. x-ø-in-b'iij [**jas** u-tzaak-ik sub']
COM-B3S-A1S-say how A3S-cook.PASS-VN tamalito
'I said how to cook tamalitos'

Earlier I noted that we might think that the examples in (88) are interrogative non-finite complements. But there are also facts that argue against such an analysis: if the non-finite clause were an interrogative non-finite complement, we would expect to find several properties that we find with non-finite complements, but we do not find those properties here.

First, the main verb in (88) has its long form, but we would expect its short form if the non-finite verb were its complement. Second, control relations are not clear, as they are with other non-finite complements: in this construction, the agent of the complement can be identical to the matrix subject, but it is not necessarily identical, whereas other non-finite complements require control. For these reasons it seems that examples like (88a–b) actually have finite complements, but that the finite verb has been deleted.

To explain examples like the ones in (88), I assume that these come from examples like the one in (89), where the complement of 'learn' is a finite clause which is headed by *b'an*. The complement of *b'an* 'make/do' is the non-finite clause that we see in (88). For this to be true, there must be a process which deletes *b'an*.

(89) x-ø-inw-eta'maaj [[jas _iu-tzaak-ik le sub']
COM-B3S-A1S-learn how A3S-cook.PASS-VN DET tamalito
x-ø-o'n le ixoq$_i$]
COM-B3S-A3S.make DET woman
'I learned how the woman cooked the tamalitos'

The aim of this section was to document certain facts about the extraction of manner that involve the use of the light verb *b'an* 'make/do'. A full analysis is sitill needed, but I will leave this for future study.

4.6 Summary

In this chapter we have seen a number of differences (as well as certain similarities) among the three types of complement clauses proposed in this study: CP-complements (finite complements with complementizers), S-complements (finite complements without complementizers), and non-finite complements. We have reviewed word order, prosody, movement of the complement, and extraction of different elements from the complement.

We have seen that some of these phenomena clearly distinguish between finite and non-finite complements. For instance, word order is VOS when the complement is non-finite, but VSO when the complement is finite with or without a complementizer. I have argued that finite complements are a type of complex object, and this explains their extraposition. A distinction between finite and non-finite complements is also made by prosody, and by movement of the complement. Non-finite complements do not form a separate prosodic phrase from the matrix, whereas finite complements do. Movement of the complement is only possible when the complement is non-finite; it is ungrammatical when the complement is finite.

One phenomenon that does not clearly distinguish between the three types of complements is the extraction of the object. Extraction of the object from the complement is grammatical from a non-finite complement as well as from an S-complement, and it varies in grammaticality from a CP-complement.

However, other types of extraction more strongly distinguish the three types of complement. In particular, we see a strong distinction with respect to the extraction of a prepositional phrase. This is evidenced by the use of the particle *wi*. When a prepositional phrase is extracted from a non-finite complement, *wi* occurs after the main verb, but not after the complement. When the prepositional phrase is extracted from an S-complement, *wi* occurs after the complement verb and not after the main verb. And when the prepositional phrase is extracted from a CP-complement, *wi* occurs after the complement verb as well as after the matrix verb.

We have seen that *wi* occurs only after a finite predicate. In complementation, we have seen that *wi* attaches to the closest finite predicate: on the main predicate when the complement is non-finite, and on the complement predicate when the complement is an S-complement. But it appears twice, on the matrix and complement predicates when the complement is a CP. This seems to be due to the presence of the complementizer.

Finally, for extraction of an expression of manner, K'iche' uses the light verb *b'an*. *B'an* functions as the matrix verb, and it takes a non-finite complement. The construction with *b'an* can be embedded in a finite complement with or without complementizer, but the complement of *b'an* itself must be non-finite. Thus, when manner is extracted from a finite complement, this complement undergoes nominalization.

Chapter 5

Choice of the complement

5.1. Introduction

In this chapter I will discuss the selection of complements by matrix predicates, and the semantic and syntactic dependencies between them. We will see that each type of complement is selected by a certain type of verb. Also, we will see that semantic dependency is reflected in the choice of complement. As Noonan (2007:101) points out:

> "[T]he stronger the semantic bond between the events described by the matrix and complement predicates, the greater the degree of syntactic integration there will be between the two clauses. Sentence-like complement types are characteristic of the weakest degree of syntactic integration, while reduced complement types signal a stronger bond, and clause union signals a still closer degree of syntactic integration."

This general picture is also reflected in K'iche'. We have seen that K'iche' has three types of complements: CP-complements, S-complements, and non-finite complements. CP-complements are syntactically the most independent type from the matrix clause, whereas non-finite complements are the least independent, and S-complements (IP) are in between. This range of semantic and syntactic

dependencies has also been found in Q'eqchi' (Kockelman 2003), another Mayan language.

I will discuss the types of matrix predicates that select each type of the three types of complement proposed in this study. I will also indicate the level of dependence or independence of the complement from the matrix clause, using TAM and referentiality as the main sources of evidence.

5.2. CP-complements

In this section I discuss the matrix verbs that select CP-complements. There are two cases. In the first case (§5.2.1), the complement is semantically independent of the matrix. In the second (§5.2.2), the complement shows some semantic dependency on the matrix. The second group involves verbs of direct perception and some desideratives.

5.2.1. Independent CP-complements

There are four classes of verbs that take CP-complements and impose no conditions on the complement: propositional attitude verbs, verbs of pretense, verbs of knowledge, and verbs of communication. Table 5.1 lists verbs in these four classes.

Table 5.1. CP-complem.ent taking predicates

Predicate class	Predicate form		CP-D[6]	CP-I	S	N-F
Propositional attitude verbs	*nimaaj*	'believe'	√			
	chomaaj	'think'	√			
Verbs of pretense	*k'otochin*	'imagine'	√			
	achik'aaj	'dream that'	√			
Verbs of knowledge	*il*	'realize'	√	√		
	ta	'hear/know'	√	√		
	eta'maaj	'know'	√	√		
	k'oxomaaj	'understand'	√	√		
	q'alaaj	'it is clear'	√			
	tziij	'it is true'	√			
Verbs of communication	*b'iij*	'tell'	√	√		
	ta	'ask'		√		

(1) x-ø-qa-nimaa-j [**chi** x-ø-i-tij ti'j kok]
COM-B3S-A1P-believe-ACT COMP COM-B3S-A2P-eat meat turtle
'We believed that you ate turtle meat.'

(2) x-ø-k'otochin chi ki-wach [**chi** x-oj-al-wo'-qa k-uuk']
COM-B3S-imagine PREP A3P-RN COMP COM-B1P-MOV-eat-SS A3P-RN
'They imagined that we came to eat with them.'

[6] CP-D= declarative CP, CP-I=interrogative CP.

(3) x-ø-inw-eta'ma-j [**chi** na x-at-pe taj]
COM-B3S-A1S-know COMP NEG COM-B2S-come IRR
'I knew that you did not come.'

The matrix predicates that select CP-complements do not impose any restrictions on the TAM and referentiality of the complement. In the examples above, aspect in the two clauses is the same; however, in the three examples below we see that this is not a requirement, since the verbs in the complement bear the incompletive aspect marker and the matrix remains in the completive aspect.

(4) **x**-ø-qa-nimaa-j [chi **k**-ø-i-tij ti'j kok]
COM-B3S-A1P-believe-ACT COMP INC-B3S-A2P-eat meat turtle
'We believed that you eat turtle meat.'

(5) **x**-ø-k'otochin chi ki-wach [chi **k**-oj-al-wo'-qa k-uuk']
COM-B3S-imagine PREP A3P-RN COMP INC-B1P-MOV-eat-SS A3P-RN
'They imagined that we would come to eat with them.'

(6) **x**-ø-inw-eta'ma-j [chi na **k**-at-pe taj]
COM-B3S-A1S-know COMP NEG INC-B2S-come IRR
'I knew that you would not come.'

Coreference between the matrix subject and the complement subject is not required either. In the examples below there is no coreference between the subject of the matrix clause and the subject of the complement clause. For instance, in (7) the matrix subject is first-person plural and the complement subject is second-person plural.

(7) x-ø-**qa**-nimaa-j [chi k-ø-**i**-tij ti'j kok]
COM-B3S-A1P-believe-ACT COMP INC-B3S-A2P-eat meat turtle
'We believed that you eat turtle meat.'

(8) x-ø-k'otochin chi **ki**-wach [chi k-**in**-wa' aw-uuk']
COM-B3S-imagine PREP A3P-RN COMP INC-B1S-eat A2S-RN
'They imagined that I would eat with you.'

(9) x-ø-**inw**-eta'maa-j [chi na k-**at**-pe taj]
COM-B3S-A1S-know COMP NEG INC-B2S-come IRR
'I knew that you would not come.'

Verbs of knowledge and communication take interrogative CPs as well as declarative CPs. Below I present examples where they take interrogative complements.

(10) ø-w-eta'-aam [**jachin** ka-ø-peet-ik]
B3S-A1S-know-PER who INC-B3S-come-SS
'I know who will come.'

(11) x-ø-u-b'ij ch-w-e [**jawi** at k'o wi]
COM-B3S-A3S-say PREP-A1S-RN where B2S EXS FOC
'S/he told me where you are.'

(12) na ø q'alaj taj [**jacha'** x-ø-ki-'an-o]
NEG B3S clear IRR why COM-B3S-A3P-make-SS
It is not clear why they did it.'

The verb of communication *b'iij* 'say/tell' takes a CP declarative complement or a CP interrogative complement, whereas the verb *ta* 'ask' only takes a CP interrogative complement.

The fact that these verbs take CP complements is consistent with typological patterns. Cross-linguistically these are the types of verbs that take the most independent complements (Noonan 2007, Givón 2001).

5.2.2. Dependent CP complements

There are two types of matrix predicates which select CP complements, but impose some semantic restrictions on them. These are verbs of direct perception, and some desideratives. I will discuss the verbs of perception in this section and the desideratives in the next section.

The verbs of direct perception *il* 'see', *ta* 'hear' and *na'* 'feel' can all be used as verbs of knowledge. When they exist as verbs of knowledge, they take CP-complements and do not impose restrictions on the complement.

Table 5.2. Verbs of direct perception

Predicate class	**Predicate form**	**CP-D**	**CP-I**	**S**	**N-F**
Verbs of knowledge and direct perception	*il* 'see'	√			
	ta 'hear'	√			
	na' 'feel'	√			

In (13) and (14) the aspect of the complement and the reference of its subject are independent of the matrix clause.

(13) **x**-ø-k-il-o [chi **k**-ø-in-k'oxomaa-j]
COM-B3S-A3P-see-SS COMP INC-B3S-A1S-undestand-ACT
'They realized that I understand it.'

(14) **x**-ø-in-na'-o [chi **k**-at-peet-ik]
COM-B3S-A1S-feel-SS COMP INC-B2S-come-SS
'I had the feeling that you would come.'

As verbs of knowledge these verbs also take interrogative CPs, as in examples (15) and (16).

(15) x-ø-in-ta [**jachin** x-ø-ul-ik]
COM-B3S-A1S-hear who COM-B3S-arrive-SS
'I heard who arrived.'

(16) x-ø-k-il-o [**jacha'** x-ø-u-b'ii-j]
COM-B3S-A3P-see-SS why COM-B3S-A3S-say-ACT
'They realized why she said it.'

The verbs *il* 'see', *na'* 'feel', and *ta* 'hear', are also used with CP-complements to describe the direct perception of an event.

(17) x-ø-in-na'-o [**chi** x-at-t'uy-e'-ik]
COM-B3S-A1S-feel-SS COMP COM-B2S-sit-PRED-SS
'I felt you sit down.'

(18) **x**-ø-qa-ta [**chi** **x**-at-ul-ik]
COM-B3S-A1P-escuchar COMP COM-B2S-arrive-SS
'We heard you arrive.'

(19) **x**-ø-inw-il-o [**chi** **x**-at-ch'aaw-ik]
COM-B3S-A1S-see-SS COMP COM-B2S-speak-SS
'I saw you speak.'

The sentence in (17) is appropriate if I am sitting in a chair with my eyes closed and you sit down on the same chair, producing some movement on the chair. The one in (18) would be appropriate if we are sitting in the living room and we hear some noise which we understand as the noise of your arrival. And (19) would be appropriate in a context where I see you speaking (for instance, where I perceive your mouth moving and/or you are addressing some people).

Examples from (17–19) show completive aspect on both clauses. If the aspect of the matrix verb is incompletive, the aspect of the complement clause verb must also be incompletive for the matrix verb to be interpreted as a verb of direct perception. When *na'* 'feel', *ta* 'hear' and *il* 'see' are used as verbs of direct perception, aspect marking in the complement must match the aspect marking in the matrix. When aspect does not match, the matrix verb is interpreted as a verb of knowledge and not as a verb of direct perception.

(20) **x**-ø-in-ta [chi **k**-at-ul-ik]
COM-B3S-A1S-hear COMP INC-B2S-arrive-SS
'I heard that you will arrive.'

The reason that aspect must match in direct perception clauses is that the time of the matrix clause event and the time of the complement clause event must be the same. In Noonan's terms, the complement of a direct perception predicate has determined/dependent time reference (DTR).

In constructions of direct perception, there is also a condition on the reference of the complement subject: it cannot be coreferential with the subject of the matrix clause. Although the translations of (21a–c) are grammatical in English, the K'iche' sentences are not possible under ordinary conditions, although (21a) sounds better than the others.

(21) a. ?x-ø-in-na'-o [chi x-in-tak'-e'-ik]
COM-B3S-A1S-feel-SS COMP COM-B1S-stand-PRED-SS
'I felt myself stand up.'

b. *x-ø-in-ta [chi x-in-ch'aaw-ik]
COM-B3S-A1S-hear COMP COM-B1S-talk-SS
Intended reading: 'I heard myself talk'

c. *x-ø-k_j-il-o [chi x-e_j-wa'-ik]
COM-B3S-A1P-see-SS COMP COM-B3P-eat-SS
Intended reading: 'They saw themselves eat.'

However, if I am watching a video recording and I observe or I see myself eating in the video or hear myself talking in the video, then my intuition is that these sentences are possible (excluding (21a) because it is not possible to feel anything from a video).

Another restriction on the direct perception construction is that the complement cannot be negated. If negation appears in the complement clause, the matrix verb is interpreted as a verb of knowledge, not as a verb of direct perception. The sentence in (22) is ambiguous in the sense that the verb in the matrix clause can be interpreted as a verb of direct perception or as a verb of knowledge.

(22)	x-ø-in-ta	[chi	x-at-ul-ik]
	COM-B3S-A1S-hear	COMP	COM-B2S-arrive-SS
	'I heard that you arrived.'		
	'I heard you arrive.'		

But if the complement is negated, the sentence is not ambiguous. It only has the knowledge interpretation. The reason is that it is not possible to perceive an event that did not happen.

(23)	x-ø-in-ta	[chi	**na**	x-at-ul	taj]
	COM-B3S-A1S-hear	COMP	NEG	COM-B2S-arrive	IRR
	'I heard that you did not arrive.'				

5.3. S-Complements

In form, S-complements are intermediate between CP and nominalized complements. They are more reduced than CP-complements because they lack a complementizer. But since they have aspect and an expressed subject, they are not as reduced as non-finite clauses. Since they are more reduced than CP-complements we expect to find more semantic dependency between the matrix event and the complement event. This prediction is borne out. In all of these

cases, the complement has DTR — that is, its time reference is determined by a higher predicate.

There are two ways in which DTR can be reflected in S-complements in K'iche'. In some cases, the aspect of the complement verb must match that of the matrix verb. This is a kind of "aspect agreement". In other cases, the aspect of the complement must be incompletive, indicating an unrealized event.

However, the complement has DTR for different reasons depending on the matrix verb. With desiderative verbs the time reference must be future relative to the time of the matrix. With *q'i'* 'endure', *xi'ij iib'* 'fear' and *kowin* 'be able' it is more like an attitude toward an event.

For almost all verbs which take S-complements, aspect marking in the complement must match aspect in the matrix clause. Two verbs in Table 5.3 can also take CP declarative complements, which I include in the discussion in this section.

Table 5.3. S-complement taking predicates

Predicate class	**Predicate form**	**CP-D**	**CP-I**	**S**	**N-F**
Desiderative	*aaj* 'want/hope'	√		√	
	oy'eej 'expect'	√		√	
Desiderative verbs	*rayiij* 'desire'			√	
	q'i' 'endure'			√	
Verbs of knowledge	*pa -k'u'x* 'wrongly assume'			√	
Verbs of fear	*xi'j ib'* 'fear'			√	
Modal	*kowinik* 'be able'			√	

In (24a–b) the aspect is the same in both clauses. In (24a) the aspect is incompletive and in (24b) it is completive.

(24)a. **ka**-ø-qa-xi'j q-iib' [**ka**-ø-qa-chap-o]
INC-B3S-A1P-be.afraid A1P-REF INC-B3S-A1P-touch-SS
'We are afraid of touching it.'

b. **x**-ø-qa-xi'j q-iib' [**x**-ø-qa-chap-o]
COM-B3S-A1P-be.afraid A1P-REF COM-B3S-A1P-touch-SS
'We were afraid of touching it.'

However, with this verb it is not possible to have incompletive in the complement and completive in the matrix or vice-versa, as the examples in (25) illustrate.

(25) a. ***ka**-ø-qa-xi'j q-iib' [**x**-ø-qa-chap-o]
INC-B3S-A1P-be.afraid A1P-REF COM-B3S-A1P-touch-SS
Intended reading: 'We are afraid of touching it.'

b. ***x**-ø-qa-xi'j q-iib' [**k**-ø-qa-chap-o]
COM-B3S-A1P-be.afraid A1P-REF INC-B3S-A1P-touch-SS
Intended reading: 'We were afraid of touching it.'

The same is true for the verb *aaj* 'want'. Aspect in the two clauses can be completive or incompletive.

(26) a. **x**-ø-w-aaj [**x**-in-'ee-k]
COM-B3S-A1S-want COM-B1S-go-SS
'I wanted/accepted to go.'

b. **ka**-ø-w-aaj [**k**-at-'ee-k]
INC-B3S-A1S-want INC-B2S-go-SS
'I want/would like you to go.'

But again, aspect cannot be different in the two clauses.

(27) a. ***ka**-ø-w-aaj [**x**-in-'ee-k]
INC-B3S-A1S-want COM-B1S-go-SS
Intended reading: 'I wanted to go.'

b. ***x**-ø-w-aaj [**k**-in-'ee-k][7]
COM-B3S-A1S-want INC-B1S-go-SS
Intended reading: 'I would like to go.'

The same is true for *kowinik* 'be able to'.

(28) a. **ka**-ø-kowin-ik [**ka**-ø-b'in-ik]
INC-B3S-be.able-SS INC-B3S-walk-SS
'S/he is able to walk.'

b. **x**-ø-kowin-ik [**x**-ø-b'iin-ik]
COM-B3S-be.able-SS COM-B3S-walk-SS
'S/he was able to walk.'

[7] This form may be possible, but the meaning of the matrix verb would be 'accept' rather than 'want'.

(29) a. ***ka**-ø-kowin-ik [**x**-ø-b'in-ik]
INC-B3S-be.able-SS COM-B3S-walk-SS
Intended reading: 'S/he is able to walk.'

b. ***x**-ø-kowin-ik [**ka**-ø-b'iin-ik]
COM-B3S-be.able-SS INC-B3S-walk-SS
Intended reading: 'S/he was able to walk.'

The verb *oy'eej* 'hope/expect' also requires aspect matching, but the only possibility is incompletive aspect marker in both clauses.

(30) a. **k**-ø-inw-oy'ee-j [**k**-at-peet-ik]
INC-B3S-A1S-hope-ACT INC-B2S-come-SS
I hope you will come/I expect you to come.'

b. ***x**-ø-inw-oy'ee-j [**x**-at-peet-ik]
COM-B3S-A1S-hope-ACT COM-B2S-come-SS
Intended reading: I hope you will come/I expect you to come.'

All the verbs which take S-complements require aspect matching. In Table 5.3, I enclose these verbs in a dark frame. In conclusion, it seems that aspect matching is an important feature of S-complements in K'iche'.

S-complements are also referentially dependent. For almost all S-complements, the subject of the complement must be coreferential with an argument of the matrix clause. If the matrix verb is transitive, the subject of the complement must be coreferential with the matrix subject. For instance, (30a) has coreferential subjects and it is grammatical, but (30b) does not have coreferential subjects and it is ungrammatical.

(30) a. x-ø-**in**-rayii-j [x-ø-**in**-tij jun w-alanxaax]
COM-B3S-A1S-desire-ACT COM-B1S-A1S-eat one A1S-orange
'I desired to eat an orange.'

b. *x-ø-**in**-rayii-j [x-ø-**a**-tij jun w-alanxaax]
COM-B3S-A1S-desire-ACT COM-B1S-A2S-eat one A1S-orange
Intended reading: 'I desired that you eat an orange.'

There are two exceptions to this coreference condition. There are two matrix verbs that take S-complements and do not require coreference. These are the verbs *aaj* 'want' and *oy'eej* 'expect'. *Aaj* allows coreference of the two subjects or disjoint subjects.

(31) a. ka-ø-**w**-aa-j [k-**in**-'ee-k]
INC-B3S-A1S-want-ACT INC-B1S-go-SS
'I want to go/I would like to go.'

b. ka-ø-**w**-aa-j [k-**at**-'ee-k]
INC-B3S-A1S-want-ACT INC-B2S-go-SS
'I want you to go/I would like you to go.'

Oy'eej 'expect' requires that the matrix and complement subjects be disjoint: (32a) is an example with disjoint subjects and the sentence is grammatical, but (32b) has coreferential subjects and this results in ungrammaticality.

(32) a. k-ø-**inw**-oy'ee-j [k-**at**-peet-ik][8]
INC-B3S-A1S-hope-ACT INC-B2S-come-SS
'I hope you will come/I expect you to come.'

b. *k-ø-**inw**-oy'ee-j [k-**in**-peet-ik]
INC-B3S-A1S-hope-ACT INC-B1S-come-SS
Intended reading: 'I hope to come/I expect to come.'

Even when the subjects are not coreferential, *aaj* 'want' requires that aspect in the two clauses must match as we saw before. *Oy'eej* on the other hand, seems to only allow incompletive on both verbs. The combination of completive and incompletive results in ungrammaticality as (33) shows, and completive on both verbs is also ungrammatical as we have seen.

(33) ***x**-ø-inw-oy'ee-j [chi **k**-at-peet-ik]
COM-B3S-A1S-hope-ACT COMP INC-B2S-come-SS
Intended reading: I hoped/expected you would come.'

It is interesting that these two verbs are the only desiderative verbs that also take CP-complements.

[8] The simplest way of expressing this meaning is just by using a plain transitive:

(i) k-ix-q-oy'ee-j
INC-B2P-A1P-wait-ACT
'We will wait for you (we hope you come).'

(34) ka-ø-w-aa-j [**chi** k-at-'ee-k]
INC-B3S-A1S-want-ACT COMP INC-B2S-come-SS
'I want you to go/I want that you go.'

(35) ka-ø-r-oy'ee-j [**chi** k-at-peet-ik]
INC-B3S-A3S-expect-ACT COMP INC-B2S-come-SS
'S/he expects you to come.'

When these verbs take CP-complements *oy'eej* 'expect' seems to not require disjoint reference. For some speakers coreference is possible, as in the example in (36), but for others coreference is marginal or ungrammatical.

(36) %k-ø-**inw**-oy'ee-j [chi k-**in**-peet-ik]
INC-B3S-A1S-expect-ACT COMP INC-B1S-come-SS
'I expect to come.'

Aaj 'want' requires disjoint subjects when it takes a CP-complement; if there is coreference an S-complement is used. When *aaj* 'want' and *oy'eej* 'hope/expect' take a CP-complement aspect matching is not found. The aspect in both clauses must be incompletive as in (34) and (35). In these cases the incompletive occurs because it is used to express irrealis. However, if the irrealis particle is explicit, then, the verbs can bear completive aspect, as in (37).

(37) x-ø-w-aaj [**chi** x-at-'e **taj**]
COM-B3S-A1S-want COMP COM-B2S-come IRR
'I wanted you to go/I wanted that you go.'

(38) x-ø-inw-oy'ee-j [**chi** x-at-'e **taj**]
COM-B3S-A1S-hope COMP COM-B2S-come IRR
'I hoped you would have gone.'

There seems to be a slight difference in meaning depending on whether the complement is a CP or an S. In the first case, with the complementizer *chi*, the statement is more like a command ('I want you to go'), whereas in the second case, without a complementizer, the statement is softer ('I would like you to go').

5.4. Nominalized complements

Several classes of verbs only select a non-finite complement. These include all the phasal verbs, several causative verbs, *b'an* as a light verb, and the evaluative adjectives discussed in Chapter 3 (§3.4.5).

Non-finite complements are the most reduced complement type in K'iche', as they do not express aspect or have an overt subject. Therefore, because of their form, they must depend on the matrix verb for time reference and for the identification of the complement subject. In Table 5.4, I list all verbs that take or prefer a non-finite complement.

The use of non-finite complements is appropriate for these different classes for different reasons. For the phasals it is appropriate because the complement does not describe an event separate from the matrix clause. There is just one event; and the matrix clause describes a point in the temporal structure of the event. Therefore the time reference of the complement is the same as the time reference of the matrix clause.

Table 5.4. Non-finite complement taking predicates

Predicate class	**Predicate form**		**CP-D**	**CP-I**	**S**	**N-F**
Phasal verbs	*majiij*	'start, begin'				√
	chap, *maj*	'start, begin'				√
	k'is	'finish'				√
	tak'ab'aa'	'suspend, interrupt'				√
	tanab'aa'	'suspend'				√
	to'taj	'finish'				√
	tane'	'cease'				√
	ok/qaaj	'start'				√
Causative verbs	*ya'*	'allow'				√
	koj	'involve'				√
	to'	'help'				√
	b'an	'make, do'				√
Evaluative	*aninaq*	'quick'				√
Adjectives	*no'jiim*	'slow'				√
	k'ax	'bad, hard, difficult'				√
	utz	'good'				√
	tzeb'al	'funny'				√
	k'ixib'al	'shameful'				√

Phasal verbs in K'iche' indicate inception and various kinds of termination as I show in Table 5.5.[9]

Table 5.5. Phasal verbs

	Transitive		Intransitive	
Inceptive	*chap*, *maj*	'start, begin'	*ok*, *qaaj*	'begin'
	majiij	'start, begin'		
Terminative	*k'is*	'finish'	*to'taj*	'finish'
	tak'ab'aa'	'stop'	*tane'*	'cease'
	tanab'aa'	'suspend'		

[9] In table 5.5 we can see that there is more than one verb for inception and more than one for termination. It seems that the use of one or other is due to the features (situation type) of the complement. For instance, the verb *majiij* 'begin' does not seem to take verbs such as 'tremble' and 'cough' among others that have the following features: dynamic, instantaneous, and atelic (Smith 1991).

(i) *x-ø-u-majij [b'irb'ot-em]
COM-B3S-A3S-begin tremble-VN
Intended reading: 'S/he began trembling.'

(ii) x-ø-u-chap b'irb'ot-eem
COM-B3S-A3S-begin tremble-VN
'S/he began trembling.'

Also, another distinction seems to be related to the duration of the event, and specifically to whether the verb refers to the onset of an event or to the nucleus of the event. For verbs of termination, it seems that in some cases the verb has to do with the control of the subject on the event or subject intentionality according to Freed (1979). I do not discuss the rules of choosing one or another form of the same aspectual verb because it is beyond the scope of this study, but it is a subject that merits more work.

(40) b'ay xaq si x-ø-in-tatab'e-j na in
then PART AFI COM-B3S-A1S-listen-ACT PART PRO1S
taq **x-ø-u-maj** [**u-b'i-x-ik** la' le jwes...]
when COM-B3S-A3S-start A3S-say-PASS-VN DEM DET judge
'Then I had to listen when the judge started to tell it' {R149I007:143}

(41) **x-ø-u-chap** [**b'irb'ot-eem**]
COM-B3S-A3S-start trembling-VN
'S/he started trembling.' {R057I001:325}

(42) x-ø-u-tanab'aa' [**wa'-iim**]
COM-B3S-A3S-suspend eat-VN
'S/he stopped eating.'

(43) x-in-ok [**pa** **wa'-iim**]
COM-B1S-start PREP eat-VN
'I started eating.'

For matrix causative verbs, non-finite complements are appropriate because the event in the complement and the event in the main clause have the same time reference (or very close time reference) and the participants must overlap.

(44) x-e$_i$-nu$_j$-ya' [pa _$_i$k-una-x-ik] le ak'alaab'$_i$
COM-B3P-A1S-allow PREP cure-PASS-VN DET children
'I allowed the children to be cured.'

(45) x-oj$_i$-ki$_j$-to' [chi _$_i$ki$_k$-kuna-x-ik le ak'alaab'$_k$]
COM-B1P-A3P-help PREP cure-PASS-VN DET children
'They helped us to cure the children.'

For evaluative adjectives, it may be the case that they take non-finite complements because they represent generic conditions, they are timeless "in the sense that they represent general conditions or states… because they represent non-events" (Noona 2007:104).

(46) ø k'ax [u-keem-ik le paas]
B3S bad A3S-weave.PASS-VN DET belt
'It is difficult to weave the belt.'

(47) ø no'jiim [u-pach'u-x-ik le nu-wi']
B3S slow A3S-braid.PASS-VN DET A1S-hair
'It takes a long time to braid my hair.'

These verbs in Table 5 do not permit CP and S-complements.

With a CP-complement

(48) *x-ø-u-maj-o [**chi** k-ø-u-b'i-j] la' le jwes...
COM-B3S-A3S-start-SS COMP COM-B3S-A3S-say-ACT DEM DET judge
Intended reading: 'The judge started to tell it'
{Modified from R149I007:143}

With an S-complement

(49) *x-ø-u-maj-o [k-ø-u-b'i-j] la' le jwes...
COM-B3S-A3S-start-SS COM-B3S-A3S-say-ACT DEM DET judge
Intended reading: 'The judge started to tell it'
{Modified from R149I007:143}

With a CP-complement

(50) a. *x-e-nu-ya'-o [**chi** x-e-kuna-x] le ak'alaab'
COM-B3P-A1S-allow-SS COMP COM-B3P-cure-PASS DET children
Intended reading: 'I allowed the children to be cured.'

b. *x-e-nu-ya'-o [x-e-kuna-x] le ak'alaab'
COM-B3P-A1S-allow-SS COM-B3P-cure-PASS DET children
Intended reading: 'I allowed the children to be cured.'

Finally, evaluative predicates do not select CPs and S-complements.

(51) a. *ø k'ax [**chi** k-ø-u-kem le paas]
B3S bad COMP INC-B3S-A3S-weave DET belt
Intended reading: 'It is difficult for her to weave the belt.'

b. *ø k'ax [k-ø-u-kem le paas]
B3S bad INC-B3S-A3S-weave DET belt
Intended reading: 'It is difficult for her to weave the belt.'

5.5. Mixed complements

In this section I will discuss the cases where one verb can take more than one type of complement. All of them take non-finite complements, but they can also

take one or more of the other types. From Table 5.6 we can see that basically there are three groups of verbs based on the types of complements they take. The first group consists of verbs that take both S-complements and non-finite complements. These are mainly manipulative or causative verbs. The second group consists of verbs that take declarative CP-complements, S-complements, and non-finite complements. There are only two verbs in this group. And in the third group are verbs that take all four types of complement.

Table 5.6. Mixed complement taking predicates I

Predicate class	**Predicate form**		**CP-D**	**CP-I**	**S**	**N-F**
Manipulative/ca	*taqchi'j*	'force'			√	√
usative verbs	*q'il*	'impede/stop/prevent'			√	√
	nab'aaj	'remind'				√
Factive verbs	*k'amon*	'get used to'	√		√	√
	uk'laaj	'get used to'	√		√	√
Factive verbs	*sachon*	'forget'	√	√	√	√
	na'taj	'remember'	√	√	√	√

We will first consider their behavior when they take S-complements and then we will contrast that with their behavior when they take other types of complements. We have seen that when predicates select S-complements, usually the aspect on both clauses matches. Also, there is usually inherent control (that is, mandatory coreference between the object of the matrix clause and the subject of the complement). However, this may not be always the case. In this section, first we are going to evaluate the cases where the matrix selects an S-complement. This is the shaded column in table 5.6. For now, we are going to skip the two verbs for 'get used to'.

The manipulative verbs *taqchi'j* 'force', *q'il* 'impede/prevent', and *nab'aaj* 'remind' can select either S-complements or non-finite complements. When they take an S-complement they have DTR and mandatory coreference. The time of the complement cannot be earlier than that of the matrix clause, and in addition, the two events must be very close in time. Aspect in the complement must either match that of the matrix verb, as in (52a), or it must be incompletive, as in (52b).

(52) a. **x**-e-nu-taqchi'ii-j [**x**-e-k-il le ak'alaab']
COM-B3P-A1S-force-ACT COM-B3P-A3P-see DET children
'I forced them to take care of the children.'

b. **x**-e-nu-taqchi'ii-j [**k**-e-k-il le ak'alaab']
COM-B3P-A1S-force-ACT INC-B3P-A3P-see DET children
'I forced them to take care of the children'

This is also true for *q'il*.

(53) a. **x**-e-ki-q'il le ajchakiib' [**x**-ø-ki-wok le ja]
COM-B3P-A1S-prevent DET workers COM-B3P-A3P-build DET house
'I prevented the workers from building the house.'

b. **x**-e-ki-q'il le ajchakiib' [**ka**-ø-ki-wok le ja]
COM-B3P-A1S-prevent DET workers INC-B3P-A3P-build DET house
'I prevented the workers from building the house.'

However, aspect must match when the matrix predicate is *sachon* 'forget' or *na'taj* 'remember'.

(54) a. **x**-ø-sachon ch-k-e [**x**-e-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B3P-bathe-VN
'They forgot to bathe themselves.' (They did not bathe.)

b. ***x**-ø-sachon ch-k-e [**k**-e-atin-ik]
COM-B3S-forget PREP-A3P-RN INC-B3P-bathe-VN
Intended reading: 'They forgot to bathe themselves.'
(They did not bathe.)

(55) a. **x**-ø-na'taj ch-k-e [**x**-e-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B3P-bathe-VN
'They remembered to bathe themselves.'
(They did bathe themselves.)

b. ***x**-ø-na'taj ch-k-e [**k**-e-atin-ik]
COM-B3S-forget PREP-A3P-RN INC-B3P-bathe-VN
Intended reading: 'They remembered to bathe themselves.'
(They did bathe themselves.)

Regarding referentiality, manipulative verbs require object control when their complement is an S-complement. Thus, the object of the matrix verb must be identical with the subject of the complement.

(56) x-**e**-ki-q'il le ajchakiib' [ka-ø-**ki**-wok le ja]
COM-B3P-A1S-prevent DET workers INC-B3P-A3P-build DET house
'They prevented the workers from building the house.'

(57) x-**e**-nu-taqchi'-iij [k-e-**k**-il le ak'alaab']
COM-B3P-A1S-force-ACT INC-B3S-see DET children
'I forced them to take care of children.'

(58) *x-**e**-nu-taqchi'-iij [k-ø-**aw**-il le ak'alaab']
COM-B3P-A1S-force-ACT INC-B3S-A2S-see DET children
Intended reading: 'I forced them that you take care of them.'

These patterns of control are the same that we saw for non-finite complements. The difference is that here the subject of the complement clause is expressed as an agreement marker on the complement verb. Therefore we find what Stiebels (2007) calls inherent control. It is the meaning of the matrix predicate that requires coreference of subjects of the two verbs, and not the lack of an expressed subject on the complement verb.

In this regard *sachon* 'forget' and *na'taj* 'remember' require coreference when they take an S-complement. For disjoint subject reference, with these verbs a CP-complement is required, as I will show later.

With coreference

(59) a. x-ø-sachon ch-**k**-e [x-**e**-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B3P-bathe-SS
'They forgot to bathe themselves.' (they did not bathe)

b. x-ø-sachon ch-**k**-e [x-at-**ki**-sik'ii-j]
COM-B3S-forget PREP-A3P-RN COM-B2S-A3P-call-ACT
'They forgot to call you.' (they did not call you)

c. *x-ø-sachon ch-**k**-e [x-**at**-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B2SP-bathe-SS
Intended reading: 'They forgot that you bathed.'

This also applies to *na'taj* 'remember'.

(60) a. x-ø-na'taj ch-**k**-e [x-**e**-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B3P-bathe-SS
'They remembered to bathe themselves.' (They did bathe themselves.)

b. x-ø-na'taj ch-**k**-e [x-at-**ki**-sik'ii-j]
COM-B3S-forget PREP-A3P-RN COM-B2P-A3P-call-ACT
'They remembered to call you.'

c. *x-ø-na'taj ch-**k**-e [x-**at**-'ee-k]
COM-B3S-forget PREP-A3P-RN COM-B2P-go-SS
Intended reading: 'They remembered that you left.'

I am now going to discuss the cases where matrix predicates select more than one complement, and what factors condition the choice of a CP-, S- or non-finite complement. I will start by discussing the cases where the matrix predicate selects S- and non-finite complements. We just reviewed the conditions for the use of an S-complement. Non-finite complements, as we pointed out in the previous section, do not carry aspect or argument marking because they depend for those features on the matrix clause. The matrix clause and the non-finite complement either overlap in time or they are very close, or the time of the non-finite complement is not specified. In table 5.6, repeated as table 5.7 below, I have enclosed the column representing the uses in question in a dark frame.

Table 5.7. Mixed complement taking predicates II

Predicate class	**Predicate form**	**CP-D**	**CP-I**	**S**	**N-F**
Manipulative verbs	*taqchi'j* 'force'			√	√
	q'il 'impede/stop/prevent'			√	√
	nab'aaj 'remind'			?	√
Factive verbs	*k'amon* 'get used to'	√		√	√
	uk'laaj 'get used to'	√		√	√
Factive verbs	*sachon* 'forget'	√	√	√	√
	na'taj 'remember'	√	√	√	√

In (61) and (62) I present pairs of examples with the matrix verb *taqchi'j* 'force' with an S-complement in (61-62a) and with a non-finite complement in (61-62b). Judgments of speakers about the grammaticality of (61a-b) vary a lot. For some speakers (61b) sounds more natural than (61a), but for others it is the other way round; however, both seem to be grammatical.

(61) a. x-oj-u-taqchi'ii-j [x-oj-wa'-ik]
COM-B1P-A3S-force-ACT COM-B1P-eat-SS
'S/he forced us to eat.'

b. x-oj-u-taqchi'-j [pa wa'-iim]
COM-B1P-A3S-force-ACT PREP eat-SS
'S/he forced us to eat.'

(62) a. x-oj-u-taqchi'ii-j [x-ø-qa-ch'aj le laq]
COM-B1P-A3S-force-ACT COM-B3S-A1P-wash DET dish
'S/he forced us to wash the dishes.'

b. x-oj-u-taqchi'-j [ch-u-ch'aaj-ik le laq]
COM-B1P-A3S-force-ACT PREP-A3S-wash.PASS-VN DET dish
'S/he forced us to wash the dishes.'

Some speakers indicate that the difference between S-complements and non-finite complements is that with S-complements, as in (61a) and (62a), the subject of the complement is implied to carry out the event of the complement (so the speaker could not say 's/he forced us to wash the dishes, but we did not'); whereas the non-finite complement, as in (61b) and (62b), does not produce such an implication, but rather implies that the subject was pressured to perform it and could have refused (so the speaker could say 's/he forced us to wash the dishes, but we did not').

We expect that when there is semantic integration between the complement and the matrix verbs, as in (61a) and (62a), there should also be more syntactic integration; however, this dos not seem to be the case. In (61a) and (62a) the complements are finite, and therefore there is less syntactic integration between them; but there is more semantic integration, since the complement is understood to be realized, which is not the case in (61b) and (62b) where the complement is non-finite.

A possible explanation to this unexpected result has to do with the unproductivity of non-finite complements with the verb 'force'. The acceptability of a non-finite complement varies from speaker to speaker, but (61b) seems to be more accepted than (62b). The difference is that the non-finite verb in (61b) is intransitive, whereas in (62b) it is transitive. I checked other non-finite transitive verbs and speakers seem to not very like them.

In other cases there does not seem to be a big difference in meaning between an S-complement and a non-finite complement. Contrast the examples in (63). The one in (63a) has an S-complement and the one in (63b) has a non-finite

complement; however, there does not seem to be a clear difference between them, although (63b) may be used in a context where the speaker forgets to take a shower because something else happened, while in (63a) it could be that there is not a specific reason for forgetting it. Other speakers indicate that (63a) is used in a more recent situation, whereas (63b) in a more remote (or distant in time) situation.

(63) a. x-ø-sachon ch-w-e [x-in-atin-ik]
COM-B3S-forget PREP-A1S-RN COM-B1S-bath-VN
'I forgot to take a shower.'

b. x-ø-sachon [atin-eem] ch-w-e
COM-B3S-forget bathe-VN PREP-A1S-RN
'I forgot to take a shower.'

The verb 'get used to' has two forms that are intransitive: *k'amon* and *uk'laaj*. It seems that *k'amon* is less common than *uk'laaj*, according to some speakers. *K'amon* seems to prefer CP-complements as in (64). In (64a) coreference is not required, since the complement is a CP; however, the TAM must be incompletive since the verb is understood as habitual. The sentence seems ungrammatical without the complementizer, as in (64b).

(64) a. x-ø-k'amon ch-e [**chi** k-at-'e ronojel q'iij
COM-B3S-get.use.to PREP-RN COMP INC-B2S-go all day
'S/he got used to the fact that you leave every day.'

b. ?x-ø-k'amon ch-e [k-at-'e ronojel q'iij
COM-B3S-get.use.to PREP-RN INC-B2S-go all day
'S/he got used to the fact that you leave every day.'

When there is coreference, as in (65), the sentence should not have a complementizer.

(65) x-ø-k'amon ch-**w**-e [k-**in**-'e ronojel q'iij]
COM-B3S-get.use.to PREP-A1S-RN INC-B1S-go all day
'I got used to the fact that I go every day.'

The use of a complementizer sounds odd when there is coreference of subject, as (66) shows.

(66) ?x-ø-k'amon ch-w-e [**chi** k-in-'e ronojel q'iij]
COM-B3S-get.use.to PREP-A1S-RN COMP INC-B1S-go all day
'I got used to the fact that I go every day.'

What is clear in this case is that when there is no coreference a CP-complement is used, but when there is coreference an S-complement is used. These two facts are in accordance with what we have seen about the occurrence or selection of CP and S-complements.

The intransitive *k'amon* also selects non-finite complements such as the examples in (67), but it is not clear if there is any difference in meaning between the three forms of complements, and I will not discuss this further.

(67) x-ø-k'amon [b'en-aam] ch-w-e
COM-B3S-get.used.to go-VN PREP-A1S-RN
'I got used to the fact that I go.'

The use of the other intransitive verb for 'get used to', *uk'laaj,* seems clearer. *Uk'laaj* can take all three types of complement: CP, S, and non-finite complement. A normal CP-complement occurs when there is a complementizer and there is no coreference of subjects, as in (68).

(68) x-ø-uk'laj ch-w-e [**chi** k-at-'e ronojel q'iij]
COM-B3S-get.used.to PREP-A1S-RN PREP INC-B2S-go all day
'I have gotten used to the fact that you leave/go every day.'

An S-complement occurs when there is no complementizer and there is coreference of subjects, as in (69).

(69) x-ø-uk'laj ch-**w**-e [k-**in**-'e ronojel q'iij]
COM-B3S-get.used.to PREP-A1S-RN INC-B1S-go all day
'I have gotten used to the fact that I leave/go every day.'

However, even when there is coreference of subjects, *chi* can occur. This occurs when emphasis is put on the complement. The sentence in (70) could occur in a context where somebody insists that I should not go or travel today (even though traveling is something that I do every day), but I say or insist that I will go, because I am used to the fact that I do go every day and today will not be the exception. So it seems that a CP-complement reports a relation to a fact.

(70) x-ø-uk'laj ch-w-e [**chi** k-in-'e ronojel q'iij]
COM-B3S-get.use.to PREP-A1S-RN COMP INC-B1S-go all day
'I have gotten used to the fact that I leave/go every day.'

Uk'laaj also selects a non-finite complement. As expected, when it selects this type of complement, control relations should be displayed. Semantically, when the complement is a CP it reports a relation to a fact, and when it is a non-finite complement it reports a relation to a situation.

(71) x-ø-uk'laj [b'en-aam] ch-w-e ronojel q'iij
COM-B3S-get.use.to go-VN PREP-A1S-RN all day
'I got used to the fact that I go every day.'

Uk'laaj selects CP-complements when there is no coreference, it selects S-complements when there is coreference, and it selects non-finite complements when control relations are displayed.

I have presented an approach to the difference among the three types of complements with the matrix verb 'get used to'. What these facts show is that in some cases there is not a clear distinction in terms meaning between one type of complement and another. Whether there can be a difference in meaning or not may be due to specific properties of each matrix predicate.

Finally, I will discuss the cases where the matrix predicate takes the four types. So far I have identified two verbs in this group. These are *sachon* 'forget' and *na'taj* 'remember', marked in a dark frame in Table 5.8.

Table 5.8. Mixed complement taking predicates III

Predicate class	**Predicate form**	**CP-D**	**CP-I**	**S**	**N-F**
Manipulative verbs	*taqchi'j* 'force'			√	√
	q'il 'impede/stop/prevent'			√	√
	nab'aaj 'remind'			?	√
Factive verbs	*k'amon* 'get used to'	√		√	√
	uk'laaj 'get used to'	√		√	√
Factive verbs	*sachon* 'forget'	√	√	√	√
	na'taj 'remember'	√	√	√	√

Since I have already addressed the distinction between S-complements and non-finite complements, in this section I will address the distinction between CP and S-complements.

We have seen that CP-complements do not impose any restrictions regarding TAM and referentiality. This is true for *sachon* 'forget' and *na'taj* 'remember'. In (72a) and (73a) the complement is a declarative CP, and in (72b) and (73b) the complement is an interrogative one. Neither of these verbs imposes any restrictions in this regard.

(72) a. x-ø-sachon ch-k-e [**chi** x-e-atin-ik]
COM-B3S-forget PREP-A3P-RN COMP COM-B3P-bathe-SS
'They forgot that they bathed themselves.' (factive)

b. x-ø-sachon ch-k-e [**jachin** x-e-atin-ik]
COM-B3S-forget PREP-A3P-RN who COM-B3P-bathe-SS
'They forgot who bathed.'

(73) a. x-ø-na'taj ch-k-e [**chi** x-e-atin-ik]
COM-B3S-remember PREP-A3P-RN COMP COM-B3P-bathe-SS
'They remembered that they bathed themselves.' (factive)

b. x-ø-na'taj ch-k-e [**jachin** x-e-atin-ik]
COM-B3S-remember PREP-A3P-RN who COM-B3P-bathe-SS
'They remembered who bathed themselves.'

I will use declarative CP-complements to contrast with S-complements. When *sachon* 'forget' and *na'taj* 'remember' select CP-complements, they function as factive verbs. Thus, even when the matrix is negated, the truth holds for the event in the complement.

(74) a. x-ø-sachon ch-k-e [chi x-e-atin-ik]
COM-B3S-forget PREP-A3P-RN COMP COM-B3P-bathe-SS
'They forgot that they bathed themselves.'
(Implies: They did bathe themselves.)

b. **na** x-ø-sachon **ta** ch-k-e [chi x-e-atin-ik]
NEG COM-B3S-forget IRR PREP-A3P-RN COMP COM-B3P-bathe-SS
'They did not forget that they bathed themselves.'
(Implies: They did bathe themselves.)

This also is true for *na'taj* 'remember'.

(75) a. x-ø-na'taj ch-k-e [chi x-e-atin-ik]
COM-B3S-remember PREP-A3P-RN COMP COM-B3P-bathe-SS
'They remembered that they bathed themselves.'
(Implies: They did bathe themselves.)

b. **na** x-ø-na'taj **ta** ch-k-e [chi x-e-atin-ik]
NEG COM-B3S-remember IRR PREP-A3P-RN COMP COM-B3P-bathe-SS
'They did not remember that they bathed themselves.'
(Implies: They did bathe themselves.)

When the complement is an S-complement, the matrix verbs are more like implicative verbs, rather than factive verbs. Thus, there is an implication that the event in the complement did not take place.

(76) a. x-ø-sachon ch-k-e [x-e-atin-ik]
COM-B3S-forget PREP-A3P-RN COM-B3P-bathe-SS
'They forgot to bathe themselves.'
(Implies: They did not bathe themselves.)

b. x-ø-na'taj ch-k-e [x-e-atin-ik]
COM-B3S-remember PREP-A3P-RN COM-B3P-bathe-SS
'They remembered to bathed themselves.'
(Implies: They did bathe themselves.)

When the matrix verbs are negated, the truth of the event in the complement does not hold.

(77) a. na x-ø-sachon ta ch-k-e [x-e-atin-ik]
NEG COM-B3S-forget IRR PREP-A3P-RN COM-B3P-bathe-SS
'They did not forget to bathe themselves.'
(Implies: They did bathe themselves.)

b. na x-ø-na'taj ta ch-k-e [x-e-atin-ik]
NEG COM-B3S-remember IRR PREP-A3P-RN COM-B3P-bathe-SS
'They did not remember to bathed themselves.'
(Implies: They did not bathe themselves.)

5.6 Summary

In this chapter we have seen that each type of complement is selected by specific matrix predicates. Some matrix predicates select more than one type of complement. We have seen that CP-complements do not impose any restrictions with respect to TAM and referentiality on the complement.S-complements usually require aspect matching and coreference, although we have seen that there may be some exceptions. Thus, we can conclude that this is a tendency; this tendency shows that the S-complement is more dependent on the matrix predicate than a CP-complement would be.

Non-finite complements require control relations. One argument of the matrix predicate is obligatorily coindexed with the subject of the complement clause. Non-finite complements lack TAM and therefore they have DTR from the matrix predicate.

When a matrix predicate selects more than one type of complement, in some cases there is a difference in meaning between each type of complement; however, this is not always the case. We have seen that there is no clear meaning distinction between S- and non-finite complements when the matrix verb that selects both is the same.

Thus, K'iche', as is true of other languages, shows that syntactic integration is also reflected in semantic integration or dependency of the complement on the matrix predicate.

Chapter 6

Purpose clauses

6.1. Introduction

According to Schmidtke (2009:20), "purpose clauses are part of complex sentence constructions which encode that one verbal situation, that of the matrix clause, is performed with the intention of bringing about another situation, that of the purpose clause". In the example below, the purpose clause starts with *in order to* and it follows the matrix clause.

(1) Maria went to the bakery [**in order to** get some croissants].

As Schmidtke indicates, purpose clauses have not been well studied. However, there are some studies, the most relevant of which is on English (Jones 1991). Other studies, according to Schmidtke, have been focused on particular features of purpose clauses (Haspelmath 1989, Kazenin 1994, Cristofaro 2003 and 2005, Verstraete 2008). From these studies we know that both finite and non-finite purpose clauses are common, but that the properties of particular purpose clause constructions in specific languages may vary.

Schmidtke (2009:199-201) indicates that across the sample he investigated there are five purpose construction types:

(i) "Finite purpose clauses: such clauses are typically marked by an overt purposive conjunction, adposition or affix."

(ii) "Non-finite purpose clauses: such clauses are typically nominalized or even more commonly infinitival clauses. Oftentimes, the infinitive marker itself or the purpose marker of the construction historically derives from an allative and/or benefactive case marker."

(iii) "Motion-cum-purpose constructions, motion purpose complements and purposive auxiliary constructions. Purpose clauses often encode the highly frequent experiential pattern of moving somewhere in order to achieve a certain goal. As a result, many PCs are governed by a matrix clause containing a verb of motion."

(iv) "Constructions with purposive inferences. We have reason to believe that a purposive interpretation is often intended in a coordinate 'and' serial verb or quotative construction."

(v) "Avertive (lest) constructions = negative purpose"

In this study I propose that K'iche' has three types of purpose clauses.

(i) Finite purpose clauses introduced by the subordinator *reech*, as in (2).

(2) x-ø-in-loq' ulo jun wuuj
COM-B3S-A1S-buy DIR one book

[**r-eech** k-ø-a-sik'i-j u-wach]
A3S-RN INC-B3S-A2S-call A3S-RN
'I bought a book (in order) for you to read it.'

(ii) Non-finite purpose clauses, always with a preposition (*chi* or *pa*), as in (3) and (4).

(3) x-oj-u-k'am ulo [**ch-**u-k'ayi-x-ik wa]
COM-B1P-A3S-receive DIR PREP-A3S-sell-PASS-VN food
'S/he brought us to sell food.'

(4) x-oj-u-k'am ulo [**pa** k'ayi-n-ik]
COM-B1P-A3S-receive DIR PREP sell-AP-VN
'S/he brought us to do selling.'

(iii) Finite purpose clauses that are not introduced by any subordinator, as in (5).

(5) x-oj-'ee-k [x-e'-q-il-a-la r-qa-sook]
COM-B1P-go-SS COM-B3S.MOV-A1P-see-DEP-INM DET-A1P-bed
'We went, we went quickly to see our beds.' {R022I001:075}

In their internal form these three types of purpose clauses correspond to the three types of complement clauses that I have discussed in previous chapters: finite clause with complementizer, non-finite complement, and finite complement without complementizer.

Earlier work on K'iche' (Larsen 1988, López 1997) proposed two types of purpose clauses: finite and non-finite. Those works classify the finite type with

other finite adverbial clauses, and Larsen (1988) discusses the similarities between non-finite complements and non-finite purpose clauses. In this study I extend these earlier analyses in several ways. I provide further evidence that finite purpose clauses introduced by a subordinator are adverbial clauses, not complement clauses. I also show some new evidence that non-finite purpose clauses are very similar to non-finite complement clauses; however, I argue that non-finite purpose clauses are not complements, since they are not arguments of their matrix predicates but adjuncts. Finally, I propose the third type of purpose clause listed above, which is finite and not introduced by any subordinator. I propose that this type of purpose clause is part of a paratactic construction. To the best of my knowledge the third type has not been discussed in previous studies. Table 6.1 summarizes the proposal I make, and compares it with my earlier proposal concerning complement clause types. A CP-complement is an argument, while a CP-purpose clause is an adjunct; an S-complement is an embedded argument, while an S-purpose clause is part of a paratactic construction; and a non-finite complement is an argument, while a non-finite purpose clause is an adjunct.

Table 6.1. Complement and purpose clauses

	Complement	**Purpose**
CP	Argument	Adjunct
S	Embedded argument	Paratactic
NF	Argument	Adjunct

In terms of Schmidtke's types, K'iche' finite purpose clauses with *reech* correspond to Type 1, K'iche' non-finite purpose clauses corresponds to Type 2, and K'iche' finite purpose clauses without complementizers combine the properties of Types 3 and 4.

In this chapter I will describe and evaluate the internal as well as the external properties of each type of purpose clause, starting first with finite purpose clauses with subordinator, then non-finite purpose clauses, and finally finite purpose clauses without subordinators. I will also compare each type of purpose clause to each type of complement, since there are many similarities, but also some differences.

6.2. Finite purpose clauses

Finite purpose clauses are very simple: they have finite, fully inflected verbs, and are introduced by the relational noun *-eech* preceded by the third person ergative marker *r-* (giving *reech,* sometimes reduced to *re*).

(6) k-in-chakun-ik [**r-eech** k-in-wa'-ik]
INC-B1S-work-SS A3S-RN INC-B1S-eat-SS
'I work to eat.'

(7) x-ø-in-loq' ulo jun alanxax [**r-eech** ka-ø-qa-tij-o]
INC-B3S-A1S-buy DIR one orange A3S-RN INC-B3S-A1P-eat-SS
'I bought an orange so that we can eat it'

(8) k-ø-in-ya' xe r-a'qan xe ri q'ab' la
INC-B3S-A1S-give RN DET-foot RN DET hand 2SF
[**r-eech** k-ø-in-tyoxi-j le nu-chuq'aab']
A3S-RN INC-B3S-A1S-thank-ACT DET A1S-strength
'... I offer (it to) you (under your hands and feet) to thank you for my strength.' {R117I006:83}

Reech purpose clauses usually conform to the definition of purpose clauses from Schmidtke (2009:20): "purpose clauses are part of complex sentence constructions which encode that one verbal situation, that of the matrix clause, is performed with the intention of bringing about another situation, that of the purpose clause". As the definition indicates, to have a purposive interpretation, the action described by the first verb must be performed with intention by an agent. The class of verbs which can express this kind of action includes intransitives (9) and transitives (10).[1]

Intransitive verbs

(9)

chakunik	'work'
wa'ik	'eat'
warik	'sleep'
b'inik	'walk'

Transitive verbs

(10)

q'atuuj	'visit'
loq'	'buy'
k'ayiij	'sell'
sik'iij	'call/take'
k'am	'bring'
ya'	'give'
sipaaj	'give'

[1] There are some non-verbal predicates that can take finite purpose clauses, but I will discuss them later since their occurrence is semantically constrained. The structure of the purpose clauses in these cases is the same as with verbal predicates.

In (6) above there is an example of intransitive matrix verb, in (7) an example of a transitive matrix verb, and (8) has an example of a ditransitive matrix verb. (Note that 'give' is considered a ditransitive verb since it assigns three theta roles, although only two are marked on the verb).

This means that intransitive verbs that do not have an agent acting intentionally do not participate in this construction. In (11) the matrix verb is not agentive and the sentence is ungrammatical.

(11) *x-ø-kam-ik [r-eech na k-ø-u-riq
COM-B3S-die-SS A3S-RN NEG INC-B3S-A3S-encounter
ta chi k'ax]
IRR PART bad
Intended reading: 'S/he died so that s/he does not suffer anymore.'

However, *reech* constructions are also possible when the situation encoded in the first clause does not have an agent acting with intention. The matrix predicate in these cases is a non-verbal predicate such as the existential or a positional.

(12) ø k'o kan wa [**r-eech** ka-ø-qa-tij-o]
B3S EXS DIR food A3S-RN INC-B3S-A1P-eat-SS
'There is food for us to eat.'

(13) ø rajawaxiik jun ch'iich' ch-w-e
B3S necessary one machete PREP-A1S-RN
[**r-eech** k-ø-in-choy le q'ayees]
A3S-RN INC-B3S-A1S-cut DET weeds
'I need a machete to cut the weeds.'

(14) a. ø saq chi kan le ichaaj [**r-eech** k-ø-aa-tzak-o]
B3S white PART DIR DET greens A3S-RN INC-B3S-A2S-cook-SS
'The greens are clean already so that you (can) cook them.'

b. ø tak'al le ak'aal chla' [**r-eech** ka-ø-qa-ch'ab'ee-j]
B3S stand DET child over.there A3S-RN INC-B3S-A1P-talk-SS
'The child is standing there so that we can talk to him/her.'

In the examples from (12) to (14) there is coreference of arguments between the matrix and purpose clauses, but this is not a requirement. In (15) there is no coreference.

(15) ø k'o jun tz'i' pa le u-chi ja
B3S EXS IND dog PREP DET A3S-RN house
[**r-eech** maj jachin k-ø-ok-ik]
A3S-RN N.EXS INT INC-B3S-enter-SS
'There is a dog in the door so that nobody can go in.'

In these examples it seems that the first clause encodes a situation (or a condition) which makes it possible for the event encoded in the second clause to be brought about. In (12) the event described in the first clause has no agent acting with intention, but the existence of the food makes it possible for us to eat

the food.[2] It seems then that "purpose clause" is too narrow to describe all of the situations in which *reech* clauses can be used. However, for lack of a better term, I will continue to refer to *reech* clauses as purpose clauses.

Finite *reech* purpose clauses are quite independent of the matrix clause. In this way they are like CP-complements. First, we have seen that when the CP-complement clause is finite, it must follow the matrix subject, giving VSO order. *Reech* purpose clauses must also follow the matrix subject, which is not, however, changed with respect to its position after the object, giving the order VOS-*reech*. In other words, both types of clauses go at the end of a sentence.

	V		S	
(16)	x-ø-k-eta'ma-j		le	winaq
	COM-B3S-A3P-know-ACT		DET	people
	O			
	[chi	x-u'l	le	ajtijaab']
	COMP	COM-B3P.come	DET	teachers
	'People knew that the teachers arrived.'			

	V	O		S	
(17)	x-ø-ki-k'am	ulo	alanxax	le	winaq
	COM-B3S-A3P-receive	DIR	orange	DET	people

[2] This seems to be the 'availability' property that Simonin (2011) discusses for the English 'Weak Purpose Clauses' in contrast with Purpose Clauses *per se*. In English each type has its own structure. The availability property exists in K'iche', but unlike English and other Mayan languages such as Tseltal and Q'anjob'al (Polian et al 2015), K'iche' does not make any formal distinction between purpose clauses that include the availability property from the ones that do not include this property.

PC

[r-eech ka-ø-qa-tij-o]

A3S-RN INC-B3S-A1P-eat-SS

'People brought oranges so that we could eat them.'

Second, we saw earlier that morphemes with alternating forms occur in their long form when they are followed directly by a CP-complement, as in (18). This is also true when they are followed by a *reech* purpose clause, as (19) illustrates. Before the CP-complement in (18), the matrix verb has the phrase-final suffix *-o*, and before the purpose clause in (19), the matrix predicate also has a suffix — in this case *-u*.

(18) x-ø-k-il-**o** [**chi** k-ø-in-k'oxomaa-j]

COM-B3S-A1P-see-SS COMP INC-B3S-A1S-undestand-ACT

'They realized that I understand it.'

(19) x-ø-u-k'ut-**u** [**r-eech** ka-ø-q-il-o]

COM-B3S-A1P-show-SS A3S-RN INC-B3S-A1P-see-SS

'S/he showed it so that we can see it.'

This is true for all elements with alternating forms, such as the irrealis particle *taj* for negation, the particle *k'ut* for interrogation, and others.

Third, *reech* finite purpose clauses, like finite CP-complements, can have internal negation. The example in (20) has a CP-complement that includes internal negation. In (21) the subordinate clause is a *reech* purpose clause, and it also includes internal negation.

(20) x-ø-k-il-o [chi **na** k-ø-in-k'oxoma-j **taj**]
COM-B3S-A1P-see-SS COMP NEG INC-B3S-A1S-undestand-ACT IRR
'They realized that I do not understand it.'

(21) k-in-wa'-ik [r-eech **na** k-in-yowaj **taj**]
INC-B1S-eat-SS A3-RN NEG INC-B1S-get.sick IRR
'I eat so that I do not get sick.'

Finally, *reech* finite purpose clauses, like CP-complements, do not impose any restrictions regarding the reference of the subject. There can be coreference: in (22) and (23) there is coreference between subjects, and in (24) there is coreference between the matrix object and the subject of the purpose clause.

(22) k-in-chakun-ik [r-eech k-in-wa'-ik]
INC-B1S-work-SS A3S-RN INC-B1S-eat-SS
'I work to eat (I eat).'

(23) x-ø-qa-k'am lo alanxax
COM-B3S-A1P-receive DIR orange
[r-eech ka-ø-qa-tij-o]
A3S-RN INC-B3S-A1P-eat-SS
'We brought oranges to eat.'

(24) x-oj-ki-t'uy-ub'aa' [r-eech k-ix-qa-tatab'ee-j]
COM-B1P-A3P-sit-TR A3S-RN INC-B2P-A1P-listen-ACT
'They sat us down to listen to you.'

Although this is like the control patterns we have seen before, it is not control. For there is no requirement that the subject of the purpose clause be coreferential with any argument of the matrix. In (25) there is no coreference between the arguments of the matrix clause and the purpose clause.

(25) a. k-in-chakun-ik [r-eech k-at-wa'-ik]
INC-B1S-work-SS A3S-RN INC-B2S-eat-SS
'I work so that you can eat.'

b. x-ø-u-k'aq b'i jun ab'aj [r-eech k-ix-k-il loq]
COM-B3S-A3S-throw DIR one stone A3S-RN INC-B2P-A3P-see DIR
'S/he threw a stone so that they can see you (pl).'
(i.e., S/he threw the stone to get their attention so that they would see you)

We have seen that there are four properties (word order, choice of alternating morphemes, absence of referential restrictions, and the possibility of negation) that *reech* purpose clauses share with CP-complements. They also share these properties with other kinds of finite adverbial clauses.

For instance, in (26) — involving a temporal clause — we see that the matrix verb has a long morpheme *-ik*, that internal negation is possible, and that there is no coreference between the subjects.

(26) x-in-b'ison-**ik** [taq **na** x-at-pet taj]
COM-B1S-be.sad-SS when NEG COM-B2S-come IRR
'I was sad when you did not come.'

The example in (27) is a reason/cause clause. The subordinate clause has negation; in this example the matrix object is coreferent with the subordinate subject, but this is not a requirement. Also, notice that the reason clause comes after the matrix subject (VOS-reason).

(27) x-ø-ki-tij le wa le ak'alaab'
COM-B3S-A3P-eat DET food DET children
[**r-umal** **na** ø joron **taj**]
A3S-RN NEG B3S cold IRR
'The children ate the food because it was not cold. '

Although *reech* finite purpose clauses share properties with CP-complements, there is one way in which they pattern with finite adverbial clauses and non-finite complements, which is extraction. We have seen that it is possible to extract some phrases from CP-complements, but it is not possible to extract any element from a *reech* finite purpose clause. Examples in (28b) and (29b) illustrate that extraction of a locative adjunct is not possible from a *reech* finite purpose clause.

(28) a. k-in-chakun-ik [r-eech k-at-wa' pa tijob'al]
INC-B1S-work-SS A3S-RN INC-B2S-eat PREP school
'I work so that you can eat at school (because I pay for it).'

b. ***jawi** k-at-chakun-ik [r-eech k-at-wa' **wi**]
where INC-B2S-work A3S-RN INC-B2S-eat FOC
Intended reading: 'What is the place such that you work so that you can eat in that place'?

Example (28b) with *wi* in the purpose clause is ungrammatical because it is not possible to extract a locative from a *reech* finite purpose clause. Example (29) shows that extraction of a direct object is not possible from a *reech* finite purpose clause.

(29) a. k-at-chakun-ik [r-eech k-e-a-tzuq le aw-alk'waal]
INC-B2S-work-SS A3S-RN INC-B3P-A2S-feed DET A2S-children
'You work so that you feed your children.'

b. ***jachin** k-at-chakun-ik [r-eech k-e-a-tzuq-u ___]
who INC-B2S-work-SS A3S-RN INC-B3P-A2S-feed-SS
Intended reading: 'Who are the people such that you work so that you can feed them?'

But extraction of locative adjuncts and of direct objects is possible from CP-complements. Example (30a) illustrates the extraction of the object from a CP, and (30b) illustrates the extraction of a locative from a CP as well.

(30) a. **jas** x-ø-aw-il-o [chi x-ø-u-tij __ le tz'i']?
what COM-B3S-A2S-see-SS COMP COM-B3S-A3S-eat DET dog
'What did you see that the dog ate?'

b. **jawi** x-ø-ki-b'i-j wi [chi k-e-'e wi]?
where COM-B3S-A3P-say-ACT FOC COMP INC-B3S-go FOC
'Where did they say that they would go?'

The impossibility of extraction from a finite purpose clause is also true for other adverbial clauses. For instance, it is ungrammatical to extract an object from

a temporal clause as in (31). It is also ungrammatical to extract an object from a reason clause as in (32).

(31) a. x-ø-aw-il le ixoq [taq x-ø-u-koj
COM-B3S-A2S-see DET woman when COM-B3S-A3S-bring
ulo **le wa**]
DIR DET food
Lit: 'You saw the woman when she brought the food.'

b. ***jas** x-ø-aw-il le ixoq [taq
what COM-B3S-A2S-see DET woman when
x-ø-u-koj uloq_]?
COM-B3S-A3S-bring DIR
Intended reading: 'What did you see that the woman brought?'

(32) a. x-ø-u-xi'j r-iib' le ak'aal
COM-B3S-A3S-be.afraid-ACT A3S-REF DET child
[r-umal le ixoq x-ø-u-ch'ey le tz'i']
A3S-RN DET woman COM-B3S-A3S-hit DIR dog
'The child was scared because the woman hit the dog.'

b. ***jas** x-ø-u-xi'-j r-iib' le ak'aal
what COM-B3S-A3S-be.afraid-ACT A3S-REF DET child
[r-umal le ixoq x-ø-u-ch'ey-o _]?
A3S-RN DET woman COM-B3S-A3S-hit-SS
Intended reading: 'What did the woman hit that scared the child?'

Reech purpose clauses differ from both CP-complements and other adverbial

clauses in that aspect is restricted in the purpose clause. The aspect must be incompletive in the purpose clause, as in (33).

(33) jun r-aqan kantela, jun r-aqan poom,
one A3S-foot candle one A3S-foot poom
k-ø-in-ya' xe r-a'qan xe ri q'ab' la
INC-B3S-A1S-give RN DET-foot RN DET hand 2SF
[r-eech **k**-ø-in-tyoxi-j le nu-chuq'aab']
A3S-RN INC-B3S-A1S-thank-ACT DET A1S-strength
'A piece of candle, a piece of copal is what I offer you (under your hands and feet) to thank you for my strength.' {R117I006:83}

(34) **ka**-ø-ki-muli-j ju-sin ki-fondo
INC-B3S-A3P-gather-ACT one-AFFE A3P-fund
[r-eech **ka**-ø-ki-chapob'ee-j]
A3S-RN INC-B3S-A3P-use-ACT
'They collect funds so that they can use them.' {R042I006:151}

Purpose clauses have DTR. The time of the event in the purpose clause must be future relative to the time in the matrix, whereas temporal and reason clauses permit completive aspect.

In conclusion, although *reech* finite purpose clauses share many properties with CP-complements, they also show certain differences. This is due to the fact that they are not arguments of the matrix verb, but adjuncts (adverbial clauses) which modify the matrix clause.

6.3. Non-finite purpose clauses

In this section I will show that non-finite purpose clauses like the one in (35) have all the same properties as non-finite complement clauses. It is common for non-finite purpose clauses to resemble non-finite complement clauses (Schmidtke 2009, Larsen 1988, Haspelmath, 1989, among others). Indeed, are certain restrictions on non-finite purpose clauses in K'iche' which lead me to think that they may actually be complement clauses in this language. Later I will discuss these restrictions.

(35) a. x-oj-u-k'am ub'i [**ch-u**-k'ayi-x-ik wa]
COM-B1P-A3S-receive DIR PREP-A3S-sell-PASS-VN food
'S/he brought us to sell food.'

I will first show that non-finite purpose clauses have exactly the same form as the non-finite complement clauses discussed in Chapter 3, (§3.4). Second, I will show that their relation to the matrix clause is the same as that of non-finite complements. Finally, I will discuss control patterns with non-finite purpose clauses and show that they are the same as with non-finite complement clauses. These properties will help us to understand some surprising restrictions on K'iche' non-finite purpose clauses in terms of their control properties.

6.3.1. Form of the verb in non-finite purpose clauses

The forms of the non-finite verbs in purpose clauses are the same as those found in non-finite complements. In Table 6.2, I summarize those forms.

Table 6.2. Forms of verbal nouns

Types	intransitive	antipassive	passive	transitive
suffixes	-iim, -eem, -aam -ooj -ik	-ik -eem	-ik	-ik

In (36) there is an example of an intransitive non-finite purpose clause; (37) has an antipassive non-finite purpose clause, (38) a passive, and (39) a transitive non-finite purpose clause.

(36) x-oj-u-k'am ulo [pa wa'-iim]
COM-B1P-A3S-receive DIR PREP eat-VN
'S/he brought us to eat.'

(37) x-oj-'e [pa tzku-n imu't]
COM-B1P-go PREP seek-AP black.nightshade
'We went to look for black nightshade' {R015I001:069}

(38) x-oj-u-k'am lo [pa kuna-x-ik]
COM-B1P-A3S-receive DIR PREP cure-PASS-VN
'S/he brought us to be cured.'

(39) x-oj-u-k'am ub'i [ch-u-k'ayi-x-ik wa]
COM-B1P-A3S-receive DIR PREP-A3S-sell-PASS-VN food
'S/he took us to sell food.'

In all cases, the subject is controlled. This will be detailed later. But also notice that in all of the examples, the non-finite purpose clause is introduced by a

preposition: *pa* for intransitive, antipassive, and passive non-finite purpose clauses, and *chi* for transitive non-finite purpose clauses. The choice between *chi* and *pa* is determined by the same principles that determine that choice with non-finite complement clauses: *chi* when the non-finite clause is transitive, and otherwise *pa* (see Chapter 3, Section 3.4.).

One of the differences between non-finite complement clauses and non-finite purpose clauses is that non-finite complements can be direct arguments of the matrix verb (subject of an intransitive predicate, direct object of a transitive or ditransitive verb). When they are, they are not introduced by a preposition. But non-finite purpose clauses are always introduced by a preposition.

6.3.2. Properties

There are many ways in which non-finite purpose clauses are like non-finite complement clauses. First, we have seen that when alternating morphemes occur before a non-finite complement they occur in their short form. Example (40) has shown a non-finite complement where the alternating morpheme has its short form (short vowel in the last syllable of the matrix verb).

(40) x-ø-r-eta'm**a**-j [b'in-eem] le ak'aal
COM-B3S-A3S-know-ACT walk-VN DET child
'The child learned to walk.'

Alternating morphemes also occur in their short form before non-finite purpose clauses. In (41b) the use of the status suffix *-ik* is ungrammatical, therefore it should be dropped, as in (41a). Any element that signals a clause boundary does not appear in these cases. Example (42) illustrates the same point using the short form of the irrealis particle *taj*.

(41) a. x-in-nab'ej [ch-u-tas-ik qa-k'olib'al]
COM-B1S-go.ahead PREP-A3S-save-VN A1P-place
Intended reading: 'I went ahead to save us a place'

b. *x-in-nab'ej-**ik** [ch-u-tas-ik qa-k'olib'al]
COM-B1S-go.ahead-SS PREP-A3S-save-VN A1P-place
'I went ahead to save us a place'

(42) a. na x-in-nab'ej **ta** [ch-u-tas-ik qa-k'olib'al]
NEG COM-B1S-go.ahead IRR PREP-A3S-save-VN A1P-place
'I did not go ahead to save us a place'

b. *na x-in-nab'ej **taj** [ch-u-tas-ik qa-k'olib'al]
NEG COM-B1S-go.ahead IRR PREP-A3S-save-VN A1P-place
Intended reading: 'I did not go ahead to save us a place'

Word order is another point of similarity between non-finite oblique complements and non-finite purpose clauses. A non-finite complement must come after the matrix subject and not before, as in (43a) and (44a). The subject can also be expressed at the end of the sentence, as in (43b) and (44b); however, this marks it as an afterthought. The same is true for purpose clauses, as seen in the examples in (44).

V S NF-COMP
(43) a. x-oj-u-taqchi'-j le achi [ch-u-looq'-iik ichaaj]
COM-B1P-A3S-force-ACT DET man PREP-A3S-buy.PASS-VN greens
'The man forced us to buy greens.'

	V	NF-COMP	S
b.	*x-oj-u-taqchi'-j	[ch-u-looq-iik ichaaj]	le achi
	COM-B1P-A3S-force-ACT	PREP-A3S-buy.PASS-VN greens	DET man

Intended reading: 'The man forced us to buy greens.'

	V	S	NF-COMP	
(44) a.	x-oj-u-taq	le achi	[ch-u-looq'-iik	ichaaj]
	COM-B1P-A3S-send	DET man	PREP-A3S-buy.PASS-VN	greens

'The man sent us to buy greens.'

	V	NF-COMP	S
b.	*x-oj-u-taq	[ch-u-looq'-iik ichaaj]	le achi
	COM-B1P-A3S-send	PREP-A3S-buy.PASS-VN greens	DET man

'The man sent us to buy greens.'

We have seen that extraction of the object is possible from a non-finite complement, as in (45). This is also possible from a non-finite purpose clause as in (46).

(45)	**jas**	x-ø-a-taqchi'-j	le	ak'aal	[ch-u-tiij-iik __]?
	INT	COM-B3S-A2S-force-ACT	DET	child	PREP-A3S-eat.PASS-VN

'What did you force the boy to eat?'

(46)	**jas**	x-oj-'e	[ch-u-looq'-iik __]?
	what	COM-B1P-go	PREP-A3S-buy.PASS-VN

'What did we go to buy?'

It is also possible to extract a locative from a non-finite purpose clause. The example in (47) illustrates this case.

(47) **jawi** x-oj-'e **wi** [ch-u-looq'-iik]?
where COM-B1P-go FOC PREP-A3S-buy.PASS-VN
'Where did we go to buy it?'

Finally, internal negation is ungrammatical in non-finite purpose clauses just as it is in non-finite complement clauses. In (47) there is an example of this with a non-finite complement, and in (48) an example with a non-finite purpose clause.

(48) *x-oj-u-ya' [pa **na** kuna-x-ik **taj**]
COM-B1P-A3S-give PREP NEG cure-PASS-VN IRR
Intended reading: 'He allowed us not to be cured.'

(49) *x-in-pe [chi **na** r-oye'-x-iik **taj**]
COM-B1S-come PREP NEG A3S-wait-PASS-VN IRR
Intended reading: 'I came not to wait for him/her.'

In this section I have shown that non-finite purpose clauses behave like non-finite complement clauses with respect to four properties: their word order, their effects on alternating morphemes, the grammaticality of extraction from them, and the grammaticality of internal negation. Table 6.3 summarizes these properties.

Table 6.3. Properties of non-finite complement and non-finite purpose

	NF complement	NF purpose
word order	MatrixVerb+Subj+Complement	MatrixVerb+Subj+Purpose
alternating morphemes	short form	short form
extraction	Allowed	allowed
negation	not allowed	not allowed

6.3.3. Control

In this section we will see that the control patterns found in complement clauses are also found in purpose clauses.

As we saw in Chapter 3 (§3.4), in non-finite complement clauses one of the arguments requires structural control. Thus, one of the arguments of the matrix verb controls the unexpressed subject of the non-finite complement. In (50) the controllee is an intransitive subject, in (51) it is an antipassive subject, and in (53) it is a transitive subject.

(50) ch-ø$_i$-qa$_j$-chap-a [_$_j$**wa'-iim**]
IMP-B3S-A1P-start-DEP eat-VN
'Let's start eating.'

(51) x-ø$_i$-r$_j$-eta'ma-j [_$_j$**kuna-n-ik**]
COM-B3S-A3S-know-ACT cure-AP-VN
'S/he learned to cure.'

(52) xa je.la' x-ø-in-chop chaak,
PART PART COM-B3S-A1S-start work
x-ø-in$_i$-chop [**_$_i$k$_j$-iil-ik** ixoqiib'$_j$...]
COM-B3S-A1S-start A3P-see.PASS-VN women
'That's how I started to work, I started to attend women.'
{R013I001:0050}

In examples (50–52) the controller is the subject of the matrix verb. However, there are cases where there can be object control, and only object control, as in (53).

(53) na k-oj$_i$-u$_j$-ya' ta [pa **_$_i$kuna-x-ik**]
NEG INC-B1P-A3S-give IRR PREP cure-PASS-VN
'S/he does not allow us to be cured.'

We saw in Chapter 3 (3.5) that the patterns of control found in non-finite complement clauses are the following: i) when the matrix verb is intransitive, the controller is its subject; ii) when the matrix verb is transitive, the controller is its subject again; but iii) when the matrix verb is ditransitive the controller is its object. I summarize this in Table 6.4.

Table 6.4. The controller in non-finite complements

	Matrix predicate	Controller	Non-finite Complement
1.	intransitive or non-verbal	subject	Oblique argument
2.	Ditransitive	object	Oblique argument
3.	Transitive	subject	Direct argument (object)

The same patterns of control found in non-finite complements are found in non-finite purpose clauses. Thus, the matrix subject is the controller when the matrix verb is intransitive, as in (54).

(54) x-oj$_i$-'e [pa _$_i$tzku-n imu't]
COM-B1P-go PREP seek-AP black.nightshade
'We went to look for black nightshade' {R015I001:069}

When the matrix verb is transitive with an oblique argument, the controller is the object.

(55) x-oj$_i$-u$_j$-k'am ulo [pa _$_i$wa'-iim]
COM-B1P-A3S-receive DIR PREP eat-VN
'S/he brought us to eat (so that we could eat).'

(56) x-oj$_i$-u$_j$-k'am ulo [pa _$_i$kuna-x-ik]
COM-B1P-A3S-receive DIR PREP cure-PASS-VN
'S/he brought us to be cured.'

(57) x-ix$_i$-u$_j$-sik'i-j ulo [chi _$_i$q-iil-ik]
COM-B2P-A3S-call-ACT DIR PREP A1P-see.PASS-VN
'S/he called you all to take care of us.'
(i.e., so that you could take care of us.)
*'S/he$_i$ called you so that s/he$_i$ could take care of us.'

As expected, the controllee is the syntactic subject, which is not overtly marked (an antipassive subject in (54), an intransitive subject in (55), a passive subject in (56), and a transitive subject in (57)). But beyond that, we can see that

the same principles which determine the controller for non-finite complements also determine the selection of the controller for non-finite purpose clauses. Table 6.5 summarizes the situation so far. Notice that the non-finite purpose clause is always oblique, therefore situation 3 in Table 6.4 (transitive subject control when the matrix verb is ditransitive and the complement is its object) does not arise.

Table 6.5.The controller in non-finite purpose

	Matrix predicate	Controller	Non-finite Purpose
1.	intransitive	subject	oblique
2.	transitive	object	oblique

As we have seen, when the matrix verb is transitive, it is not possible for the subject to be the controller, as shown in (58). If the subject is meant to be the controller, then the form of the purpose clause has to change from non-finite to finite as in (59).

(58) *x-oj$_i$-u$_j$-k'am ulo [chi _jq_i-iil-ik]
COM-B1P-A3S-receive DIR PREP A1P-see.PASS-VN
Intended reading: 'S/he brought us to take care of.'

(59) x-oj-u-k'am uloq [**r-eech** **k-oj-r-il-o**]
COM-B1P-A3S-receive DIR A3S-RN INC-B1P-A3S-see-SS
'S/he brought us so that s/he could take care of us.'

One consequence of the fact that the subject of a transitive matrix verb cannot control the subject of a non-finite purpose clause is that a sentence like English *I bought an orange to eat (it)* cannot be translated into K'iche' using the non-finite construction (60a). The finite construction must be used (60b).

(60) a. *x-ø$_i$-in$_j$-loq’ ulo jun alanxax [ch-_$_j$u-tiij-ik]
COM-B3S-A1S-buy DIR one orange PREP-A3S-eat.PASS-VN
‘I bought an orange to eat (it).’

b. x-ø-in-loq’ ulo jun alanxax [**r-eech** k-ø-in-tij-o]
COM-B3S-A1S-buy DIR one orange A3S-RN COM-B3S-A1S-eat-SS
‘I bought an apple to eat (I eat it).’

Likewise, ditransitive verbs do not participate in this construction. Ditransitive verbs with non-finite purpose clauses are ungrammatical, as in (61). Non-finite purpose clauses with ditransitive verbs such as ‘give’ must therefore have the finite form.

(61) *x-ø-in-ya’ le alaxax ch-e le ak’aal
COM-B3S-A1S-give DET orange PREP-RN DET child
ch-u-tiij-ik
PREP-A3S-eat.PASS-VN
Intended reading: ‘I gave the orange to the child to eat.’
(i.e., so that he would eat it)

V DO IO
(62) x-ø$_i$-in$_j$-ya’ le alaxax$_i$ ch-e le ak’aal$_k$
COM-B3S-A1S-give DET orange PREP-RN DET child
PC
[**r-eech k-ø$_i$-u$_k$-tij-o**]
A3S-RN INC-B3S-A3S-eat-SS
‘I gave the orange to the child so that he would eat it.’

In summary, we have seen that the pattern of control found in non-finite complements is the same as that found in non-finite purpose clauses. When the matrix verb is intransitive, the controller is the matrix subject (as expected), and the controllee is the unexpressed subject of the non-finite purpose clause. Transitive verbs with an oblique argument that take non-finite purpose clauses, such as *k'am* 'bring' and *sik'iij* 'call', require object control. Thus, the matrix object is the controller and the unexpressed subject must be the controllee. This restricts the types of transitive verbs that can take a non-finite purpose clause in K'iche'.

6.3.4. Conclusions

In this section we have seen that non-finite purpose clauses behave like non-finite complement clauses in every respect, except that they are always oblique and never direct arguments. Non-finite purpose clauses are like non-finite complements in that i) they do not allow internal negation, ii) they use short forms of alternating morphemes, iii) they allow extraction, and iv) they display the same control pattern.

On the one hand, K'iche' can have ergative arguments as the controller, but only in complementation. As we saw in this section, an ergative argument cannot be the controller in a purpose clause. On the other hand, we have seen that the controllee is always the unexpressed subject. This is congruent with results observed typologically (Stiebels, 2007).

6.4. Motion-*cum*-Purpose: A paratactic construction

6.4.1. Introduction

As stated at the beginning of this chapter, Schmidtke's (2009) typology includes a purpose construction that occurs only with verbs of motion: so called "motion-*cum*-purpose constructions":

> "Purpose clauses often encode the highly frequent experiential pattern of moving somewhere in order to achieve a certain goal. As a result, many PCs are governed by a matrix clause containing a verb of motion" (Schmidtke 2009:200).

In this section I will show that there are two purpose constructions that occur only with verbs of motion. The first involves a movement element incorporated into the verb, and the example is in (63a). This construction has already been documented in the literature on K'iche' (Larsen 1988, López 1997). As far as I know, the second (63b) has not been documented in K'iche' or in any other Mayan language. I will propose that this is a paratactic construction.

(63) a. x-in-**e'**-wa'-oq
COM-B1S-MOV-eat-DEP
'I went to eat.'

	V1	V2
b.	x-oj-pet-ik	[x-ø-ol-qa-k'am-a']
	COM-B1P-come-SS	COM-B3S-MOV-A1P-receive-DEP

'We came to take her.'

Zavala (1993) has documented several purpose clause constructions with intransitive verbs of motion in Mayan langauges, and has shown that the verb of motion undergoes a gradual process of grammaticization. These constructions are also well described in specific languages (Haviland 1991, 1993, Craig 1993, England 1976, Aissen 1994, Mateo Toledo 2008, among others). Of the five stages that Zavala posits for the grammaticalization of IVMs as auxiliaries,[3] only one occurs in K'iche'. This is the most grammaticalized stage, Stage V, where the movement element is affixed to the main verb.

Figure 6.1. Continuum of Clause Integration of Motion Cum Embedded Clause in Mayan languages (Zavala 1993:43)

LESS <---- Integration of Clauses ----->MORE

I	II	III	IV	V
two independent clauses	motion verb with embedded clause	AUX (lacking of pronominals) with embedded clause	AUX (preceded by absolutive conveying the PAT) & embedded clause	Affixed motion morpheme and main verb

In K'iche' the two affixes which originate as grammaticalized verbs of motion are *e'-,* from *b'e* 'go', and *ul-,* from *ul* 'arrive'. Each prefix occurs after the Set B marker of an intransitive or transitive verb, and before the Set A marker of a transitive verb.

[3] He treats grammaticalization as directional separately.

(64) a. x-in-e'-wa'-oq
COM-B1S-MOV-eat-DEP
'I went to eat.'

b. x-in-e'-ki-k'am-a'
COM-B1S-MOV-A3P-receive-DEP
'They went to take me.'

The use of incorporated movement requires the use of the dependent status suffix: *-oq* in (64a) and *-a'* in (64b).

The forms of the grammaticized verbs of motion vary due to phonological or dialectal reasons. The first movement morpheme comes from the intransitive verb *b'e* 'go' but as element of movement usually is relized as *e'*, as in (65a) but when this element is followed by a Set A marker composed for a vowel there is phonological fusion between the element of movement and the Set A. The result is a vowel –Set A marker- plus a glottal stop (*b'e+u=u'*), as in (65b).

(65) a. x-at-**e'**-q-il-a'
COM-B2S-MOV-A1P-see-DEP
'We went to see you.'

b. x-ø-**u'**-k'am-a'
COM-B3S-A3S.MOV-receive-DEP
'S/he went to take him/her.'

The second movement morpheme comes from the intransitive verb *ul* 'arrive'. This morpheme can have different forms: *ul*, *al*, and *ol* (66a). When this morpheme is preceded by B3p *e*, fusion between the Set B marker and the

movement element occurs and the result is *V'l* (*u'l*, *a'l*, and *o'l*), as the example in (66b).

(66) a. x-at-**al**-q-il-a'
COM-B2S-MOV-A1P-see-DEP
'We came to see you.'

b. x-**u'l**-u-k'am-a'
COM-B3P.MOV-A3S-receive-DEP
'S/he came to take them.'

There is a second construction in K'iche' which expresses motion-*cum* purpose. Examples are shown in (67a) and (67b). This construction consists of two finite verbs. The first (V1) is an intransitive verb of motion and the second (V2) is a verb with incorporated movement.

	V1	V2	
(67) a.	x-oj-'ee-k	[x-e'-q-il-a-la	r-qa-sook]
	COM-B1P-go-SS	COM-B3S.MOV-A1P-see-DEP-INM	DET-A1P-bed

'We went, we went to see our beds quickly.' {R022I001:075}

	V1	V2
b.	x-oj-pet-ik	[x-ø-ol-qa-k'am-a']
	COM-B1P-come-SS	COM-B3S-MOV-A1P-receive-DEP

'We came to take her.'

V1 can be any intransitive verb of motion. [4] Below I list all of the possibilities. Notice that the ones that get an inceptive reading (*ok*/*qaaj* 'start') when the purpose clause is introduced by the subordinator *reech*, do not get such a reading in this case.

(68) Intransitive verbs of motion

a.	*pet*	'come'
b.	*ul*	'arrive'
c.	*b'e, e*	'go'
d.	*q'ax*	'pass by'
e.	*kanaj kan*	'remain'
f.	*ok*	'enter'
g.	*el*	'leave'
h.	*paqe'*	'ascend'
i.	*qaj*	'descend'
j.	*tzalij*	'return'

[4] All intransitive verbs of motion can participate in the paratactic construction. As we have seen there are only two incorporated movement prefixes and not every intransitive verb of motion is semantically compatible with both of them. The list of intransitive verbs of motion in (68) can be divided into thre groups. First, the intransitive verbs of motion in (68a-c) are semantically compatible only with one element of movement, these are *pet* 'come' and *ul* 'arrive' with the incorporated movement prefix *ul/al/ol-* 'arrive, and *b'e* go with the incorporated movement prefix *b'e/e/e'-* 'go'. The second group has two intransitive verbs of movement (68e-d): *q'aax* 'pass by' and *kanaj kan* 'stay' that are semantically compatible with either of the two elements of movement. The third group has intransitive verbs of movement (68f-j) that require a directional in order to function with one or the two elements of movement.

This construction can be expanded. V1 can be followed directly by its subject, and V2 can take its own object as well as other elements. In (69) the NP matrix subject follows the matrix verb V1, and the NP object of V2 follows V2.

(69) x-e-pe **le** **winaq** [x-ø-ol-ki-k'am-a
COM-B3P-come DET people COM-B3S-MOV-A3P-receive-DEP
le **ali**]
DET girl
'The people came to take the girl.'

In (70) V2 has a locative/comitative relational noun that goes at the end of the clause.

(70) x-oj-tzalij-ik [x-ix-e'-qa-q'atuj
COM-B1P-return-SS COM-B2P-MOV-A1P-visit-ACT
k-uk' **le** **i-taat** **i-naan**]
A3P-RN DET A2P-father A2P-mother
'We went back to visit you at your parents.'

If the incorporated movement morpheme is removed, the sense of purpose disappears and the two verbs are interpreted as a simple sequence of verbs.

(71) x-e-pet-ik [x-ø-ol-k-il-a']
COM-B3P-come-SS COM-B3S-MOV-A3P-see-DEP
'They came to see her.'

(72) x-e-pet-ik [x-ø-k-il-o][5]
COM-B3P-come-SS COM-B3S-A3P-see-SS
'They came, they saw her.'

However, if V1 is removed, V2 retains the purposive meaning, since this is indicated by the incorporated movement prefix.

(73) x-ø-ol-k-il-a'
COM-B3S-MOV-A1P-see-DEP
'They came to see her.'

Given this fact, we could ask what the contribution is of V1. It seems that what V1 adds is a sense of emphasis to the purpose. The use of the verb 'do' in the translation of (74) is intended to make explicit the emphatic meaning.

(74) x-oj-'ee-k [**x-e'-q-il-a-la** r-qa-sook]
COM-B1P-go-SS COM-B3S.MOV-A1P-see-DEP-INM DET-A1P-bed
'We **did** go to see our beds quickly.' {R022I001:075}

Although this construction looks like it involves a verb of motion that takes a finite S-complement, I will propose that it is really a paratactic construction. That is it is made up of two juxtaposed clauses, and neither is embedded in the other, either as a complement or as an adjunct. Although they are separate clauses, the semantic connection between them is very tight and together they form a kind of construction.

[5] Since V2 does not include movement the last suffix also changes from *-a'* to *-o*.

6.4.2. Evidence for independence (non-embedding)

Below I present some pieces of evidence that show that V2 is independent from V1. We might be tempted to look to word order for evidence of this. But in fact, the word order facts are consistent with various analyses. The word order (matrix subject after V1) is consistent with the proposal that there are two sentences. But it is also consistent with a structure in which the second clause is embedded in the first, since this is also the order we find with finite S-complements.

(76) x-e-pe **le winaq** [x-ø-ol-ki-k'am-a']
COM-B3P-come DET people COM-B3S-MOV-A3P-receive-DEP
'People came to take her.'

Alternating morphemes are another tempting piece of evidence that end up giving ambiguous results. We find the long forms of alternating morphemes before V2. In (77a) V1 has the long form *-ik*, whereas in (77b) the verb has its short form and is ungrammatical.

(77) a. x-e-pet-**ik** [x-ø-ol-ki-k'am-a']
COM-B3P-come COM-B3S-MOV-A3P-receive-DEP
'The people came to take the girl.'

b. *x-e-pe [x-ø-ol-ki-k'am-a']
COM-B3P-come COM-B3S-MOV-A3P-receive-DEP
'The people came to take the girl.'

This is consistent with the proposal that there are two independent sentences. But again it is also consistent with a structure in which the second clause is embedded in the first, since we also find the long forms before finite S-complements.

However, there also several pieces of unambiguous evidence against the idea that the second clause is embedded in the first.

The scope of negation is the first piece of evidence. Negation in the first clause does not have scope over the second clause. In fact, negation in the first clause is not possible, as in (78), unless negation also occurs in the second as in (79).

(78) ***na** x-e-'e **taj** [x-ø-e'-ki-q'atuu-j]
NEG COM-B3P-go IRR COM-B3S-MOV-A3P-visit-ACT
Intended reading: 'They did not go to visit him/her.'

(79) **na** x-e-'e **taj** [**na** x-ø-e'-ki-q'atu-j **taj**]
NEG COM-B3P-go IRR NEG COM-B3S-MOV-A3P-visit-ACT IRR
'They did not go to visit him/her.'

This is different from what we find with finite S-complements, where negation in the first clause does have scope over the second as the following example shows.

(80) **na** x-ø-w-aj **taj** [x-in-ch'aw-ik]
NEG COM-B3S-A1S-want IRR COM-B1S-talk-SS
'I did not want to talk.'

It is also different from what we find with non-finite purpose clauses, where negation on the main verb has scope over the non-finite purpose clause.

(81) **na** k-oj-u-ya' **ta** [pa kuna-x-ik]
NEG INC-B1P-A3S-give IRR PREP cure-PASS-VN
'S/he does not allow us to be cured.'

Also, notice that when the negative pronoun 'no one' is used we get similar facts to as when we use negation as in the examples above. Thus, 'no one' *maj jachin* should appear in both clauses.

(82) **maj** **jachin** x-ø-'ee-k
N.EXS who COM-B3S-go-SS
[**maj** **jachin** x-ø-e'-q'atu-n-a r-eech]
N.EXS who COM-B3S-MOV-visit-AP-DEP A3S-RN
'No one went to visit him/her.'

I assume that in order for negation in one clause to scope over a second, the second clause must be embedded in the first. This suggests that in this construction, the second clause is not embedded in the first, since negation on V1 alone is ungrammatical, and certainly does not have scope over V2.

More evidence comes from interrogation: both information questions and yes/no questions. A WH word in the first clause or a yes/no particle in the first clause cannot have scope over the second. Hence it is necessary to repeat the WH word or yes/no particle in the second clause.

(83) a. **la** x-e-'e **k'u**
INT COM-B3P-go PART
[**la** x-ø-e'-ki-jaq-a **k'u** le u-chi ja]
INT COM-B3S-MOV-A3P-open-DEP PART DET A3S-RN house
'Did they go to open the door?'

b. ***la** x-e-’e **k’u**
INT COM-B3P-go PART
[x-ø-e’-ki-jaq-a le u-chi ja]
COM-B3S-MOV-A3P-open-DEP DET A3S-RN house
Intended reading: ‘Did they go to open the door?’

c. *x-e-’e-k
COM-B3P-go-SS
[**la** x-ø-e’-ki-jaq-a **k’u** le u-chi ja]
INT COM-B3S-MOV-A3P-open-DEP PART DET A3S-RN house
Intended reading: ‘Did they go to open the door?’

This use of interrogation contrasts with both finite S-complements and non-finite purpose clauses. In (84) interrogation has scope over the S-complement and in (87) interrogation also has scope over the non-finite purpose.

(84) **la** k-ø-aaw-aj **k’ut** [k-at-’ee-k]?
INT INC-B3S-A1S-want PART INC-B2S-go-SS
‘Do you want to go?’

(85) **la** x-ix-u-k’am **k’u** ulo [pa wa’-iim]?
INT COM-B3P-A3S-receive PART DIR PREP eat-VN
‘Did s/he bring you to eat?’

Finally, extraction shows that it is not possible to move a phrase from V2 to the beginning of V1.

(86) x-at-ul-ik [x-at-al-ki'kot-a
COM-B2S-arrive-SS COM-B2S-MOV-be.happy-DEP
k-uk' le aw-alk'waal]
A3P-RN DET A2S-children
'You came to be happy with your children.'

(87) ***jachin** k-uuk' x-at-ul-ik [x-at-al-ki'kot-oq __]?
who A3P-RN COM-B2S-arrive-SS COM-B2S-MOV-be.happy-DEP
Intended reading: 'With whom did you come to be happy?'

(88) x-at-ok-ik [x-a'l-a-ch'ab'e-j le winaq]
COM-B2S-enter-SS COM-B3P.MOV-A2S-visit-ACT DET people
'You came to visit the people.'

(89) ***jachin** x-at-ok-ik [x-a'l-a-ch'ab'ee-j ___]
who COM-B2S-enter-SS COM-B3P.MOV-A2S-visit-ACT
Intended reading: 'Who did you come to visit?'

Again, this is different from what we see with finite S-complements, where it is possible to extract a phrase from the complement and move it to the matrix.

(90) **jas** x-ø-a-q'i'-o [x-ø-a-tij-o ___]
what COM-B3S-A2S-endure-SS COM-B3S-A2S-eat-SS
'What did you endure eating?'

It is also different from what we see with non-finite purpose clauses where it is possible to extract from the purpose as in the following example.

(91) a. **jas** x-oj-u-k'am lo [ch-u-k'ayi-x-iik]?
INT COM-B1P-A3S-receive DIR PREP-A3S-sell-PASS-VN
'What did he bring us to sell?'

I assume that in order to extract a phrase from one clause and move it to another, the first must be embedded in the second. Since this is completely impossible here, it is evidence that we do not have embedding.

6.4.3. Evidence for a tight semantic connection between the two clauses

So far, it looks like this construction just consists of two adjacent sentences. But this construction also has properties which show that the connection between the two clauses is much tighter than what we would ordinarily find between adjacent or even conjoined sentences. The facts I discuss here seem to show that the two clauses are syntactically independent but *must describe the same event*.

First, the subject of V2 must be coreferential with the subject of V1. In (92a) the subjects are coreferential and the sentence is grammatical. In (92b) the subjects are not correferential and the sentence is ungrammatical.

(92) a. x-**oj**-peet-ik [x-ø-ol-**qa**-k'am-a']
COM-B1P-come-SS COM-B3S-MOV-A1P-receive-DEP
'We came to take her.'

b. *x-**oj**-peet-ik [x-ø-ol-**i**-k'am-a']
COM-B1P-come-SS COM-B3S-MOV-A2P-receive-DEP
Intended reading: 'We came, you (came) to take her.'

Second, we saw earlier that negation in the first clause cannot have scope over the second, and that it is not possible to negate V1 and leave V2 without negation. In fact, if *either* clause is negated, both clauses must be negated: it is also not possible to negate V2 and leave V1 without negation. In (93a) negation is on V1 as well as on V2. In (93b) negation is only on V1 and the sentence is ungrammatical, as is (93c) where negation is only on V2.

(93) a. **na** x-e-'e **taj** [**na** x-ø-e'-ki-q'atu-j **taj**]
NEG COM-B3P-go IRR NEG COM-B3S-MOV-A3P-visit-ACT IRR
'They did not go to visit him/her.'

b. ***na** x-e-'e **taj** [x-ø-e'-ki-q'atuu-j]
NEG COM-B3P-go IRR COM-B3S-MOV-A3P-visit-ACT
Intended reading: 'They did not go to visit him/her.'

c. *x-e-'ee-k [**na** x-ø-e'-ki-q'atu-j **taj**]
COM-B3P-go-SS NEG COM-B3S-MOV-A3P-visit-ACT IRR
Intended reading: 'They went, but not to visit him/her.'

The fact that V2 cannot be negated unless V1 is also negated is especially interesting because it is different from what we find with conjoined sentences. In K'iche' it is possible to conjoint two sentences just by juxtaposing them, without an explicit conjunction, as (94) illustrates.

(94) x-in-pet-ik, **na** x-ø-inw-il **taj**
COM-B1S-come-SS NEG COM-B3S-A1S-see IRR
'I came (and) I did not see it.'

Negation shows that in the motion-*cum*-purpose construction, unlike in mere conjunction, the two clauses together must describe a single complex event or situation. If one event occurred and the second one did not, then we must be talking about two distinct events or situations, and the motion-*cum*-purpose construction cannot be used to encode it.

Third, regarding the aspects of the two clauses, there is variation about whether they should match or not. Possible combinations of aspects include completive-completive and incompletive-incompletive, in which there is matching — as in the examples below.

(95) a. **x**-oj-peet-ik [**x**-ø-ol-qa-k'am-a']
COM-B1P-come-SS COM-B3S-MOV-A1P-receive-DEP
'We came to take her.'

b. **k**-oj-peet-ik [**k**-ø-ol-qa-k'am-a']
INC-B1P-come-SS INC-B3S-MOV-A1P-receive-DEP
'We will come to take her.'

Incompletive-completive is not a possible combination.

(96) a. ***k**-oj-peet-ik [**x**-ø-ol-qa-k'am-a']
INC-B1P-come-SS COM-B3S-MOV-A1P-receive-DEP
Intended reading: 'We will come to take her.'

However, it is possible to have completive-incompletive, and it looks like this is the same construction.

(97) x-**oj**-peet-ik [k-ø-ol-**qa**-k'am-a']
COM-B1P-come-SS INC-B3S-MOV-A1P-receive-DEP
'We came to take her.' {R010I001:144}

6.4.4. Summary

In conclusion, in this section I propose that the third structure of purpose clauses in K'iche' is a paratactic construction. This is congruent with the three properties that Noonan (2007) associates with paratactic constructions and that I review below.

1. There are two independent assertions, and each clause is a separate assertion.

2. The subject must be coreferential with one argument of the higher predicate.

3. There is no complementizer or subordinator.

Thus, in (98) the first assertion is 'we came' and the second assertion is 'we came and took her''. There is certainty in the realization of the two events in this construction.

(98) x-oj-peet-ik x-ø-ol-qa-k'am-a'
COM-B1P-come-SS INC-B3S-MOV-A1P-receive-DEP
'We came, we came to take her.'

Negation and interrogation show that V1 and V2 are independent assertions and therefore each one has its own scope of negation and interrogation. It is not the case that the second verb is in the scope of the first clause, which is what we get in most S-complements — as in (99), where 'I say' is not a separate assertion from 'I want it'.

(99) ka-ø-w-aaj [k-ø-in-b'iij]
INC-B3S-A1S-want INC-B3S-A1S-say
'I want to say it.'

As stated before, the subject of both verbs must be coferential, as (99) shows. It has been shown that when the subject is disjoint the sentence is ungrammatical.

Finally, V2 is not introduced by any subordinator, as (98) shows. We have seen that the subordinator for purpose clauses is *reech*. This element cannot occur in this construction.

(100) %x-oj-'ee-k [**r-eech** x-e'-q-il-a-la
COM-B1P-go-SS A3S-RN COM-B3S.MOV-A1P-see-DEP-INM
r-qa-sook]
DET-A1P-bed
'We went, (and) we went to see our beds quickly.'

(101) %x-oj-peet-ik [**r-eech** x-ø-ol-qa-k'am-a']
COM-B1P-come-SS A3S-RN COM-B3S-MOV-A1P-receive-DEP
Intended reading: 'We came to take her.'

For some speakers *reech* is ungrammatical and for others it sounds odd, and the sentence without *reech* is better. There seem to be several reasons for this. First,

V2 is not a subordinate clause; second, purpose is already indicated in V2, therefore *reech* seems to be unnecessary; and third, there is coreference of subjects, and we have see that when there is coreference of subjects, speakers prefer to use a non-finite clause that displays control relations.

6.5. Conclusions

In this chapter I have proposed three types of purpose clauses in K'iche': finite purpose clauses or *reech* purpose clauses, introduced by the subordinator *reech*; non-finite purpose clauses, which are always introduced by a preposition; and a paratactic construction where there is no subordinator. Each type of purpose clause resembles a type of complement clause, as has been shown in detail in this chapter.

We have seen that *reech* purpose clauses are similar to CP-complements in many respects: word order, internal negation, disjoint subjects, and prosodic independency. However, *reech* purpose clauses are different from CP-complements in that they are future-oriented, and therefore they must bear incompletive TAM; also, they do not allow extraction, which is also a property of other adverbial clauses.

Non-finite purpose clauses are always introduced by a preposition since they are not direct arguments of the matrix predicate, but adjuncts. This is the main difference between non-finite complement and non-finite purpose clauses. Not only do non-finite purpose clauses have the same form as non-finite complements, they also display the same properties, such as word order, extraction, internal negation, prosodic dependency, and control relations.

The third type of purpose clause that I propose is part of a paratactic construction. This is a new proposal in the study of purpose clauses in K'iche'. This construction has two fully inflected verbs: an intransitive verb of motion

(V1), and any other verb that has incorporated movement (V2). The properties of this construction indicate that there is no embedding: for instance, there is no subordinator and each clause makes a separate assertion as evidenced by the fact that each verb must have its own marker of negation or interrogation if the construction is to be negated or interrogated. However, there are also properties that indicate semantic integration between the two clauses: they must describe the same complex event, and that there must be inherent control.

Chapter 7

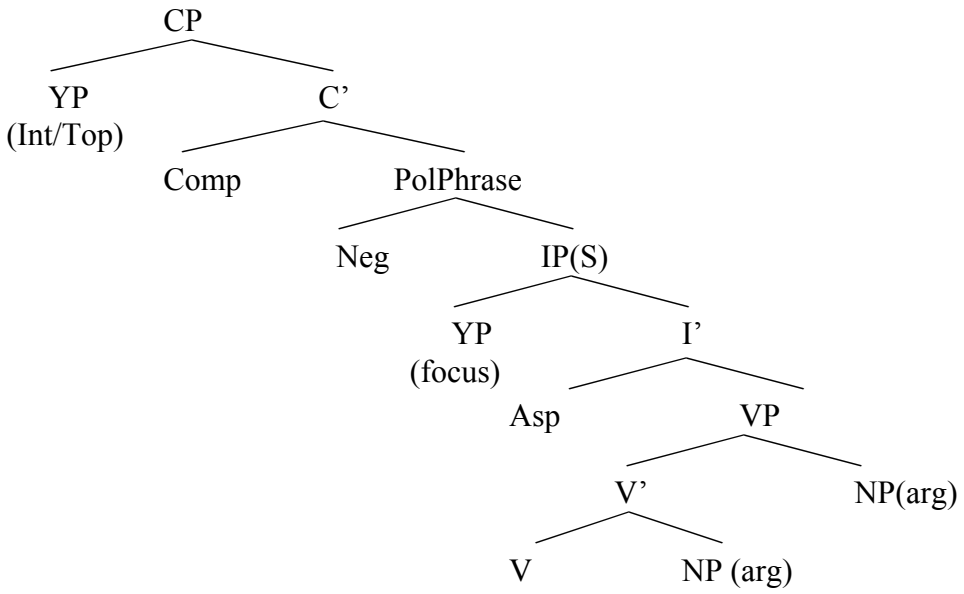
Conclusions

At the beginning of this study I observed that the study of complement and purpose clauses in K'iche', and in Mayan languages in general, is not new. Finite and non-finite clauses, especially complement clauses, have been described in many Mayan languages. However, many details still remained to be filled in. In this study I have extended the description of complement and purpose clauses in K'iche' as a contribution to the understanding of these types of clauses in K'iche' and in other Mayan languages. I have made two overall proposals, one for complement clauses and one for purpose clauses, and discussed many related issues.

First of all, I have proposed that there are three types of complement clauses in K'iche': finite complements with a complementizer (CP-complements), finite complements without a complementizer (S-complements), and non-finite complements. This proposal suggests a different structure for each type of complement clause.

A CP-complement has the structure shown in Figure 7.1, with the following properties:

Figure 7.1. Structure of a declarative clause (Aissen 1992)



A CP-complement is characterized by the following properties:

i) It is introduced by a complementizer. It is a finite clause, and so it contains all the structural positions that an independent finite structure contains. In particular, there is room for internal topic, negation, focus, and secondary predication.

ii) It extraposes, producing VSO order. In general in K'iche' grammar, one condition that forces object extraposition is the heaviness or complexity of the object. A complex object can be a complex NP, consisting of a head plus other elements such as another NP or several modifiers; however, we have seen that a CP-complement can also count as a complex object, and it takes priority over a complex NP in triggering extraposition.

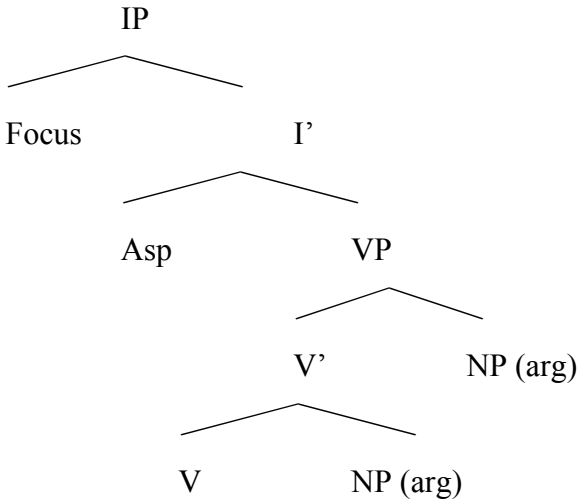
iii) It constitutes a separate prosodic phrase. The evidence for this is that alternating morphemes, which take a long form when they occur at the end of an intonational phrase, take their long form immediately preceding a CP-complement.

iv) It is selected by higher predicates of the following types: propositional attitude verbs, verbs of knowledge, verbs of communication, and pretence predicates.

v) Its TAM and the reference of its arguments are generally unrestricted by the higher predicate that selects it — except by verbs of direct perception and desideratives.

An S-complement has the structure shown in Figure 7.2.

Figure 7.2. S-complement structure



It is not introduced by a complementizer, but it is nevertheless finite.One possible analysis of this fact would be that the phrases in question are CP-complements, but with a deleted or null complementizer. This analysis would be supported by two facts. First, like CP-complements, they extrapose. Second, like CP-complements, they constitute a separate intonational phrase from the matrix clause, as shown by the fact that we find long forms of alternating morphemes preceding the complement.

However, there is also evidence that they are not CP-complements with null complementizers.

First, their internal structure is different. They are smaller: they can contain focus and a secondary predicate, but not topic and usually not negation.

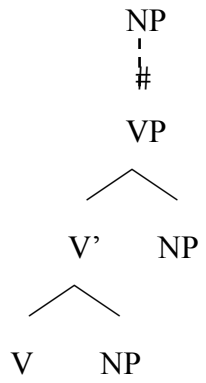
Second, they are selected by a different set of higher predicates, including desiderative verbs, verbs of fear, modals, and a predicate of knowledge.
Third, they are much more dependent on the matrix clause than CP-complements. Aspect and the reference of the subject are highly restricted. The aspect of the complement verb usually matches that of the matrix verb, and coreference between the complement subject and an argument in the matrix is usually required.

I have also shown that the relation between S-complements and the matrix clauses which contain them is not paratactic. First, the two clauses do not each make a separate assertion. This is clearly shown by negation. Negation has scope over the whole construction rather than over only one of the two clauses. Second, if this construction were a paratactic construction, coreference between the subject of the second clause and some argument in the first clause would be obligatory. But such coreference is not always found. Finally, extraction from the

second clause is possible, and it would not be possible if the second clause were not embedded.

Non-finite complements have a smaller structure than finite complements, as Figure 7.3 shows.

Figure 7.3. Non-finite complement structure



The properties of a non-finite complement are the following:

i) The verb is not marked for TAM, and the subject is never overt, but is controlled by an argument in the matrix clause.

ii) There is very little room for clausal elements: no topic, focus, negation, or secondary predication.

iii) A non-finite complement is an NP. It is case-marked like NPs and it undergoes the same movement operations as NPs.

iv) A non-finite complement does not extrapose and does not constitute a separate intonational phrase. This is expected, since non-finite complements are NPs, not clauses.

v) None-finite complements are selected by phasal and manipulative verbs. Since non-finite clauses lack TAM marking and have controlled subjects, they are highly dependent on the matrix clause.

vi) Non-finite complements are subject to control relations. The controllee is the covert subject. This argument is never overt and it corresponds to the syntactic subject of the complement predicate. This is coherent with typological results.

In K'iche' the controller can be an ergative argument, an absolutive argument, or an oblique argument. The principles governing the control relationship are the following. When the matrix verb is transitive, the controller is the matrix subject (and the complement is a direct argument of the matrix verb). When the matrix verb is ditransitive, the controller is the direct object (and the complement functions as an oblique in the matrix clause). There are also intransitive verbs and non-verbal predicates with subject controllers, and there are evaluative predicates that can have an oblique experiencer argument as the controller.

Other issues related to non-finite complements covered in this study are the following:

i) A verbal noun that has passive morphology has been argued to be transitive. This proposal is based in part on control relations. The controllee is the transitive subject, not overtly marked, and not the overt object which could correspond to the passive subject. It is also based in part on the fact that this form can have a reflexive pronoun as object, which we have seen is only possible with transitive verbs.

ii) There is a set of non-verbal predicates that can take complements. These predicates are usually evaluative adjectives. It is interesting that in these cases, the complement can *either* be the absolutive argument of the matrix predicate *or* be an oblique. When the complement is a direct argument, the controller is expressed as an oblique; but when the complement is oblique, the controller is a direct argument.

iii) Finally, at the end of Chapter 3 I introduced the light verb *b'an* make/do. This verb is a complement-taking predicate that only selects non-finite complements. One of its uses is to form manner questions in complement clauses.

In addition to the other differences between them discussed above, the three types of complement are also distinguished by different behavior when a prepositional phrase is fronted. The fronting of a prepositional phrase is overtly marked by the particle *wi*. *Wi* seeks and attaches to the closest finite verb. It attaches to the matrix verb when the complement is non-finite; it attaches to the complement verb when the complement is an S-complement; and it attaches to *both* the main verb *and* the complement verb when the complement is a CP-complement.

Regarding purpose clauses, I propose three types: finite purpose clauses with a subordinator, finite purpose clauses without a subordinator, and non-finite purpose clauses. These look parallel to the three types of complement clause, but as shown in Chapter 6, the parallelism breaks down for finite purpose clauses without a subordinator.

Finite purpose clauses with subordinators are independent clauses, just as finite complements with complementizers are. However, as adjuncts, they are not selected by the higher predicate. Further, extraction from a finite purpose clause is impossible, while it is sometimes possible from a finite complement. Finally,

because of their meaning, finite purpose clauses seem to be restricted to incompletive aspect.

Non-finite purpose clauses are basically like non-finite complements. They have the same form as non-finite complements, they allow the same internal elements, and they are introduced by the same prepositions. They also display the same control relations, which we saw explains some surprising differences between non-finite purpose clauses in K'iche' and English. Extraction from non-finite purpose clauses is also possible. For all these reasons, it is possible to see non-finite purpose clauses as complements. However, non-finite purpose clauses are not arguments, but adjuncts to the matrix predicate, whereas non-finite complements are arguments selected by the matrix predicate.

Finite purpose clauses without subordinators constitute a structure that has not been described before as far as I know. This type of purpose clause construction contains two fully inflected verbs, where V1 is an intransitive verb of motion and V2 is a verb with an incorporated movement morpheme. I showed that the second clause is in a paratactic relationship with the first caluse rather than embedded in it, based on the fact that operators in the first clause cannot take scope over the second.

Methodologically, one of the contribution of this study is the exploration of the diagnostic tests applied to each type of complement and purpose clauses. They could also be applied to other Mayan languages to see whether each form corresponds to a different type of clause or not. Some of the conclusions of this study could be extended to other Mayan languages, especially to languages of the K'iche' group and languages that do not display split ergtivity. Typologically, the VSO ordering and the selection of the controllee are relevant. On the one hand, VSO ordering is associated with the **heaviness** (greater weight/length) of the finite complements in K'iche', principle that it is relevant to to relative clause ordering cross-linguistically. On the other hand, the controllee in K'iche' is never

overt and it corresponds to the syntactic subject which is also the case found cross-linguistically.

Finally, I have left some questions for future studies. One question concerns a set of constructions in which the light verb *b'an* takes a non-finite clause and is used to introduce a manner expression. Another set of issues, which I believe to be related to each other, have to do with selection and case. More work is needed on several aspects of complement selection: for instance, there cases where the same matrix predicate takes two or the three types of complements, but where no difference in meaning has been found, or where it is not clear how to characterize the difference in meaning (for instance when the matrix is 'get used to', 'forget'). More work is also needed on the alternation between the agent oblique phrase and the dative case to express the controller of non-verbal predicates. These issues seem to be more related to semantics or lexico-semantics than to syntax.

Appendix

The following list contains the names of the speakers, and the name of the town where they come from, that were recorded by the projects: *Ch'awb'al: Documentation of formal and ceremonial discourses in K'ichee'* (ELDP 0092) and *Documentation of specialized discourses in K'ichee'* (LLILAS), although their recorded texts may not have been transcribed yet, and therefore may not have been used in this dissertion.

Names	**Town**
Abraham Chávez y Pedro Calel	Santa Lucía Utatlán
Adela García	Santa Lucía Utatlán
Alberto Ajanel Chávez	Santa Lucía Utatlán
Alejandro Anastacio Méndez	Santa Lucía Utatlán
Ana Cux Tayum	Santa Lucia Utatlán
Anastacia Cochoy	Santa Lucía Utatlán
Andrés Alfredo Ixcol (COCODE)	Santa Lucía Utatlán
Andrés Chávez Zavala y Ricardo Chávez Saloj	Santa Lucía Utatlán
Antonia Perechú Tambriz	Nahualá
Antonio Carrillo Tepaz	Santa Catarina Ixtahuacán
Antonio Macario Cotiy	Nahualá
Apolinario Yac Chávez	Santa Lucía Utatlán
Apolinario Yac	Santa Lucía Utatlán
Arnoldo Chox (COCODE)	Santa Lucía Utatlán
Augustín Tzoc Robles	Santa Lucía Utatlán

Bartolo Chávez	Santa Lucía Utatlán
Benigno Talé Chávez	Santa Lucía Utatlán
Candelaria Martina Xitamul Yac	Santa Lucía Utatlán
Carlos de Jesús Zavala Vásquez	Santa Lucía Utatlán
Carlos Leopoldo Zavala Joj	Santa Lucía Utatlán
Carlos Yac	Santa Lucia Utatlán
Carmen Ajú	Santa Lucía Utatlán
Catarina Matzar Calel	Santa Lucía Utatlán
Catarina Socorro Coj Coj	Nahualá
Catarina Tambriz	Nahualá
Cecilia Petrona Muy	Santa Lucía Utatlán
Cecilia Valentina Escún Yac	Santa Lucía Utatlán
Cipriano Francisco Cochoy Ixcol	Santa Lucía Utatlán
Crisanta Chávez Ixcol	Santa Lucía Utatlán
Cristina Leonarda Tum	Santa Catarina Ixtahuacán
Cristóbal Ricardo Escún	Santa Lucía Utatlán
Cristóbal Ixtop Perechú	Santa Catarina Ixtahuacán
Cruz Gaspar Yac	Santa Lucía Utatlán
Diego Chapeta	Nahualá
Diego Cocom Tambriz	Nahualá
Diego Domingo De Guzman Tzep	Nahualá
Diego Perechú Tzoc	Nahualá
Diego Tzoc Chox	Nahualá
Domingo Ambrocio Tzep	Santa Catarina Ixtahuacán
Domingo Chávez	Santa Lucía Utatlán
Domingo Sac Mus	Nahualá
Domingo Xitamul	Santa Lucía Utatlán
Encarnación Ixcol	Santa Lucía Utatlán

Esteban Dominga Coxolca Tayum	Santa Lucía Utatlán
Estéfana Eulogia Yac López	Santa Lucía Utatlán, Sololá
Federico Yaxón Yac	Nahualá
Felipe Obispo Xitamul Yac	Santa Lucía Utatlán
Felipe Ricardo Chávez	Santa Lucía Utatlán
Felipe Xitamul Yac	Santa Lucía Utatlán
Félix Talé Ordóñez	Santa Lucía Utatlán
Francisca Cajtunaj Ixtós	Nahualá
Francisco Ajtzalam, Juana Tambriz	Nahualá
Francisco Alejandro Chávez	Santa Lucía Utatlán
Francisco Emanuel Perechú Tambriz	Chiquix, Nahualá
Francisco López	Santa Lucía Utatlán
Francisco Yac Zavala	Santa Lucia Utatlán
Francisco Guarchaj	Nahualá
Gaspar Chox Tambriz	Nahualá
Gregorio Ramón Tzapinel Zavala	Santa Lucía Utatlán
Guadalupe Ixcol Tzul	Santa Lucía Utatlán
José Chipín y Jualián Tomás Zavala	Santa Lucía Utatlán
José Ixcol Quiche	Santa Lucía Utatlán
José Joj	Santa Lucía Utatlán
José Juan Yac y Lorenza Mactzul	Santa Lucía Utatlán
José Juan Yac	Tierra Linda, Pamezabal, Santa Lucía Utatlán
José Luis Can	Santa Lucía Utatlán
José Roberto Xitamul Tay	Santa Lucía Utatlán
José Yac Yac	Santa Lucía Utatlán
Juan Can	Santa Lucía Utatlán
Juan Florentino Xitamul	Santa Lucía Utatlán
Juan González Ajú	Santa Lucía Utatlán

Juan González Saquic	Santa Lucía Utatlán
Juana Francisca Yax Tok’	Santa Lucía Utatlán
Juana García	Santa Lucía Utatlán
Juana Paula Chamorro	Santa Lucia Utatlán
Juana Perechú Tambriz	Nahualá
Juana Tomasa Saquic Yac	Santa Lucía Utatlán
Juana Zavala	Santa Lucía Utatlán
Julia Xitamul Yac	Santa Lucía Utatlán
Julián Zavala	Santa Lucía Utatlán
Juliana Trinidad Yac Can	Santa Lucía Utatlán
Julio Victor Raxuleu Can	Santa Catarina Ixtahuacán
Justo Ernesto Tz'unun	Santa Catarina Ixtahuacán
Lencha González Xitamul	Santa Lucía Utatlán
Lorenza Can	Santa Lucía Utatlán
Lorenza Santiago Chávez Xamínez	Santa Lucía Utatlán
Lorenzo Perechu Tambriz	Nahualá
Lucía Octavia Calel Chávez	Santa Lucía Utatlán
Luis Xamínez Yac	Santa Lucia Utatlán
Luisa Apolonia Tax	Santa Lucía Utatlán
Magdalena Guarchaj Simaj	Nahualá
Manuel Ajtzalam Tambriz	Nahualá
Manuel Guarchaj Och	Santa Catarina Ixtahuacán
Manuel Guarchaj Tzep	Santa Catarina Ixtahuacán
Manuel Isidro Chox Tum	Santa Catarina Ixtahuacán
Manuel Jamínez Tambriz	Nahualá
Manuel Perechú Tambriz	Nahualá
Manuel Sac y Sac	Santa Catarina Ixtahuacán
Manuel Santos Tzapinel	Santa Lucía Utatlán

Manuel Tambriz Tum	Nahualá
Manuel Tzep Guarchaj	Nahualá
Manuel Tzep Jamínez	Nahualá
Manuela Dolores Joj Saloj	Santa Lucía Utatlán
Manuela Margarita Chávez	Santa Lucía Utatlán
Manuela Perechú Tambriz	Nahualá
Manuela Tambriz	Nahualá
Manuela Tambriz	Nahualá
Manuela Tum Catinac	Santa Catarina Ixtahuacán
Marcelo Yac Zavala	Santa Lucía Utatlan
María Guachiac	Nahualá
María Isabel Tambriz	Santa Catarina Ixtahuacán
María Juliana Saquic y Lucía Ajquí	Santa Catarina Ixtahuacán
María Pantaleona Cochoy	Santa Lucia Utatlán
María Tambriz Perechú	Nahualá
María Tzep Guarchaj	Santa Catarina Ixtahuacán
Mariana Chávez	Santa Lucia Utatlán
Mario Magadaleno Xamínez Tzep	Santa Lucía Utatlán
Martín Saquic Tulul	Santa Catarina Ixtahuacán
Martina Pixabaj	Santa Lucía Utatlán
Micaela Ixmatá López	Nahualá
Micaela Raxuleu Tambriz	Santa Catarina Ixtahuacán
Miguel Can Yac	Santa Lucía Utatlán
Miguel Gabriel Marroquín Catinac	Nahualá
Miguel Guarchaj Sac	Santa Catarina Ixtahuacán
Miguel Tzep	Santa Catarina Ixtahuacán
Miguel Simaj Tzoc	Nahualá
Miguel Tambriz Tzep	Santa Catarina Ixtahuacán

Miguel Tzoc Tzaj	Nahualá
Nicolás Irineo Quiché	Santa Lucía Utatlán
Nicolasa Ordóñez	El Molino, Santa Lucía Utatlán
Pablo Juventino Méndez Can	Santa Lucía Utatlán
Pascual Ajtzalam	Nahualá
Pascual Carrillo Tahay	Santa Catarina Ixtahuacán
Pascual Tay García	Santa Catarina Ixtahuacán
Paula Manuela Quiché	Santa Lucía Utatlán
Paula María Vásquez Ronquillo	Santa Lucía Utatlán
Pedro Noj, Cristóbal José Mario	Santa Lucía Utatlán
Pedro Xocom Tambriz	Santa Catarina Ixtahuacán
René Geovani Ixcamparic y Lorenzo	Nahualá
Ricardo Chávez Saloj	Santa Lucía Utatlán
Ricardo Felipe Chávez	Santa Lucía Utatlán
Rodrigo Vásquez	Santa Lucía Utatlán
Rosario Vásquez	Santa Lucía Utatlán
Santiago Can Can	Santa Lucía Utatlán
Sebastián Guarchaj	Santa Catarina Ixtahuacán
Sebastiana Perechú	Santa Catarina Ixtahuacán
Silverio Yac	Santa Lucía Utatlán
Teresa Petrona Méndez Vásquez	Santa Lucía Utatlán
Tomás Tzep Quemá	Santa Catarina Ixtahuacán
Venturio Guachiac Guarchaj	Nahualá

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Vita

Telma Angelina Can Pixabaj, daughter of Anastacia Pixabaj Ixcol and Miguel Paulino Can Yac, was born in a K'iche' community of Santa Lucía Utatlán, Sololá, Guatemala, where she attended High School at the *Escuela Normal Regional de Occidente*. She earned her B.A. in Linguistics at the *Universidad Rafael Landívar*, Guatemla in 2004. From fall 2006 to summer 2007, Can Pixabaj studied in the Intensive English Program at The University of Texas at Austin. In fall 2007 she joined the graduate program in the Department of Linguistics at The University of Texas at Austin, where she completed her M.A. in 2009.

Can Pixabaj's interests in linguistics include: descriptive linguistics, especially morphosyntax and syntax; documentary linguistics, and Mayan languages. She has conducted research on dialect variation in K'iche' as well as other aspects of the K'iche' grammar. She worked in the documentation project of Uspantek (OKMA-ELDP) and produced a reference grammar of this language.

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This manuscript was typed by the author.